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the Sea Swallow



BEING THE ANNUAL REPORT
OF THE ROYAL NAVAL
BIRD WATCHING SOCIETY

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ROYAL NAVAL BIRD WATCHING SOCIETY
(*Affiliated to the British Trust for Ornithology*)

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CONTENTS

	<i>Page</i>
EXECUTIVE COUNCIL	<i>Inside Cover</i>
FOREWORD	3
A TRIBUTE TO—	
ADMIRAL SIR WILLIAM TENNANT, K.C.B., C.B.E., M.V.O., AND CAPTAIN J. D. F. ELVISH, C.B.E.	4
EDITORIAL	5
OBSERVATIONS OF SEA BIRDS	
BY W. R. P. BOURNE, M.A., M.B., B.CH., M.B.O.U.	9
REPORTS ON LAND BIRDS AT SEA	
SUMMARIZED BY CAPTAIN G. S. TUCK, D.S.O., R.N., M.B.O.U.	40
SOME NOTES ON BIRDS AT SEA DURING WINTER AND EARLY SPRING, 1962/63. FROM REPORTS & LETTERS RECEIVED	60
SHORT NOTES	62
THE BIRDS OF SOME ISLANDS IN THE INDIAN OCEAN	
BY LIEUTENANT COMMANDER R. O. MORRIS, R.N.	68
A NOTE ON THE BIRDS OF THE GILBERT ISLANDS	
BY LIEUTENANT COMMANDER R. O. MORRIS, R.N.	79
HERE AND THERE WITH THE BIRDS	
FROM THE EDITOR'S LOGBOOK	85
REPORT OF A BIRD EXAMINED IN THE HAND	
AMPLIFYING DETAILS	88
FINANCIAL STATEMENT	92
NEW MEMBERS 1962/63	94



RED-FOOTED BOOBY (*Sula sula*)

Immature plumage

Photo by Seaman Cable Hand A. Fisher, H.M.T.S. Monarch

FOREWORD

It is seventeen years since the Royal Naval Bird Watching Society first came into being, aimed at the outset primarily at stimulating an interest in the observation of birds at sea amongst personnel of the Royal Navy. Since then, full membership has been extended to the personnel of the Merchant Navy and the Fishing Fleets, and its coverage at sea extends to all corners of the Globe.

No greater honour could be afforded to R.N.B.W.S. to-day than the gracious action of His Royal Highness The Duke of Edinburgh in giving his Patronage to our Society.

During the past year the scope and standard of the information being collected and reported by members in *Sea Swallow* has become known for the first time to a larger number of Ornithological Societies and Natural History Museums throughout different parts of the world. I welcome their interest in our Annual Report.

I realise that readers outside the Society neither see the originals of the different forms of our report sheets on sea and land birds, nor are aware of the checking and double checking which takes place in correspondence. Only those who travel to remote areas of the oceans, perhaps for the first time, and we are fortunate in having members who have this opportunity, know the hazards and difficulties which arise in factual identification of species. On our report sheets every observation has to carry the critical words 'positive' or 'uncertain' with a space for qualifying remarks.

Mistakes in identification must sometimes occur, but it is our constant aim to be as sure as possible of our ground, or to make it clear if we are not.

To our own members I wish to pay tribute to the wonderful keenness being maintained. I would ask our members in the Merchant Navy to introduce new members. It is clear from the extracts on birds included in ships' meteorological logs, which we much appreciate receiving, that there are many more who are interested in birds. I hope too that the extension of membership to personnel of our Fishing Fleets will bring new birdwatchers into the fold.

Elsewhere in this issue will be found a tribute to our Founder President, Admiral Sir William Tennant, who died this year. I would only like to add to that tribute the reminder that it was his keen and infectious interest in birds that stimulated so many of us into taking such a lively interest ourselves. I feel it is our duty to him to pass on similar enthusiasm to younger people.

I join our Merchant Navy members in particular in our sense of deep regret in the death of Captain J. D. F. Elvish.

I wish all members continued success and enjoyment in their efforts in the coming year. I hope they will not forget to try and get new members to share their work and amusement.

Nigel Henderson.

Admiralty House,
Mount Wise,
Plymouth.

ADMIRAL SIR WILLIAM TENNANT, K.C.B., C.B.E., M.V.O.

Admiral Sir William Tennant who died on 21st July, 1963, will be remembered with deep gratitude and affection by many bird lovers in the Royal Navy, but particularly by that little group of officers who were responsible, under his inspired Presidency, for forming the R.N.B.W.S. in 1947.

The logs of his observations of seabirds during many cruises, which appeared in successive early editions of *Sea Swallow*, were an object lesson in detail and accuracy, and pointed the way to the present system of reporting.

Sir William never missed an opportunity of seeking out bird haunts, nor of giving his whole hearted support to the R.N.B.W.S.

An extract from his forward of the first volume of *Sea Swallow* in 1947 is as apt today as it was sixteen years ago.

"And to go one further, how much more interesting that four-hour watch on the bridge or on deck when you can keep an eye lifted for any bird that passes and can recognise it or look it up in, say 'Alexander's Birds of the Ocean'. Isn't this the object of our Royal Naval Bird-Watching Society? . . .

And lastly there is the wise protection of birds.

If this generation is not careful, succeeding ones will suffer, and that tragic word 'extinct' will creep over our bird lists. A word of wisdom here and there all helps public opinion which as a whole is still a bit elementary about bird life and the protection that the rarer kinds need."

CAPTAIN J. D. F. ELVISH, C.B.E., M.N.

Captain J. D. F. Elvish who died on 16th August, 1963, whilst on holiday in Scotland, was elected a Vice-President of the Royal Naval Bird Watching Society in 1960.

Not only was the Society singularly privileged in the presence of such a distinguished officer to represent the Merchant Navy on its Board, but will always remember with gratitude the help and advice which he gave in representing the interests of R.N.B.W.S. amongst Shipping Lines.

EDITORIAL

STATE OF THE SOCIETY

One honorary member and nineteen new members have joined over the year, and our total membership has risen to 273, of which 69 are members of the Merchant Navy.

Each year our membership has grown quietly, reinforced by bird-watching members at sea whose keenness and active co-operation in rendering reports has magnified the value of the information from the oceans in a marked degree in the last few years.

At our last Annual General Meeting it was agreed to approach the authorities administering the British Fishing Fleet with a view to extending membership to their personnel.

The President of the British Trawler Federation, Mr. A. W. Suddaby, has been most co-operative in this matter. As a result an open letter from our society, entitled "Naval Birdwatchers open their ranks to men of the Trawler Fleet" has been published in the *Trawling Times*, a journal which circulates to every near, middle and distant water trawler sailing from ports in England and Wales, inviting personnel of all ranks to membership. We shall welcome personnel of this salt water service.

REPORTS FROM SEA (received since 1st January, 1963)

The following reports have been received:—

SEA REPORT SHEETS (*sea birds*). These sheets record the separate observations of each species at the time and place they occur during a voyage. For a direct "turn round voyage there and back" both voyages are included under one serial number 50 reports.

CENSUS SHEETS (*sea birds*). These sheets are used as an alternative to sea report sheets by observers on routes well frequented by sea birds, and show the total numbers of different species observed over set periods of observation without requiring each single observation to be entered separately 28 reports.

SEA REPORT SHEETS (*land birds*). Vide similar sea bird sheets 29 reports.

REPORT OF A BIRD EXAMINED IN THE HAND. A special form for recording details of plumage, colour of soft parts and measurements Sea birds, 15 reports. Land birds, 12 reports.

In the examination report sheet it has not been possible on account of space to give amplifying details of the exact method of taking measurements called for. Further information was included in R.N.B.W.S. bulletin No. 54, dated June, 1963. For the information of new members the details are repeated in the present report.

GENERAL

NATIONAL NATURE WEEK. R.N.B.W.S. provided a display of some one hundred and twenty photographs of land and sea birds as part of the Southampton N.H.S. National Nature Week Exhibition. Over 6,000 visitors attended this exhibition. We are very grateful to Captain N. W. Lucas, M.N., Chairman of the Southampton N.H.S., for making the arrangements for our display.

THE INTERNATIONAL INDIAN OCEAN OCEANOGRAPHIC EXPEDITION, 1963/1964. The expedition is now well under way, operating in the Indian Ocean and Arabian Sea, with Mr. Roger Bailey in R.R.S. *Discovery III* as the British representative ornithologist.

The previous published literature covering the area refers mainly to the ornithology of the islands, with very little worthwhile details of the birds at sea. The recently published "Preliminary Field Guide to the birds of the Indian Ocean", prepared by the Smithsonian Institution, Washington, D.C., contains a great deal of valuable past data, synoptic species list, field identification notes and sketches of species, and island lists. It does not however extend its coverage further north than the Seychelles and Laccadives.

We are glad, therefore, to have made available to Roger Bailey the full set of members' original sea report sheets covering the Arabian Sea and North Indian Ocean, together with Cdr. Willis' and Lieut. Cdr. Morris' special surveys. These reports, as members will know, refer mainly to the ocean north of the Gulf of Aden, and contain thousands of observations.

We hope these have been of value, and it was pleasant to hear from Roger Bailey during his preliminary studies that he had gained the impression that the standard of identification of our observers was very high. There was no other comparable source of such observations at sea.

SOME ACTIVITIES OF SPECIAL INTEREST

Pride of place must, I think, go to Ben King, late Lieutenant U.S. Navy, whom it now seems is working his passage round the world in search of birds. During the past year he has spent 2 weeks in the Philippines and 4½ months in New Guinea during which he saw over 300 species of birds. Arriving at Cairns in Queensland he spent 2 months hitchhiking to Darwin and Wyndham, thence down the centre via Alice Springs to Adelaide and on to Brisbane, listing some 390 species. He is going on to Malaya, Pakistan, India and Afghanistan—some journey!

Lieutenant Commander Morris, R.N., in the surveying ship H.M.S. *Cook*, has visited remote islands, reefs and shoals in the South West Pacific, off the Lyra Reef north east of New Ireland, Timboor Island northernmost of the Yasawa Islands enclosing Bligh Water, and the Gilbert Islands, a note on which is included in this report.

Lieutenant A. Y. Norris, R.N., has also done extensive birdwatching not only in Australia and New Zealand but among unfrequented islands in the S.W. Pacific as well.

Lieutenant Commander M. Casement, R.N., has been continuing his series of Radar observations at sea of migratory movements of land birds in the Mediterranean. The scope of the report under preparation is likely to be on a scale more suitable for publication in a scientific journal.

Other members at sea prefer to steer clear of shoals and reefs on their lawful occasions, but many have maintained interesting report sheets under the most vile conditions in the North Atlantic in the early part of this year—good work.

SEA SWALLOW

CIRCULATION. During the past year a complimentary copy of *Sea Swallow* has been sent to a number of distinguished ornithological societies and museums in other countries which were not on our mailing list

already. Fifteen of these bodies have either subscribed towards full sets of back numbers or towards future editions. We take this opportunity of expressing our thanks for their interest in our work.

THE PACIFIC PROJECT (Smithsonian Institution, U.S. National Museum, Washington 25, D.C.)

We have heard from Mr. Winston E. Banko, the Director of this project in the Division of Birds, that the Institution is interested in the large scale acquisition of data concerning the distribution of birds in the Central Pacific Ocean area.

At his request we have been glad to supply at the outset details of the sea and land bird reporting systems in use by R.N.B.W.S. We shall be interested to follow the course of this project and to co-operate with the Institution whenever possible.

CONTRIBUTIONS

Once again Dr. W. R. P. Bourne has given an immense amount of time, and a great service to R.N.B.W.S., in the preparation of his observations and systemic analysis of sea bird reports. Without his ready help the publication would lose much of its value.

I am most grateful for the many contributions I have received. I hope that members who send me notes on land birds in Britain will not be too disappointed when these are not included in *Sea Swallow*. They are carefully filed, but preference is given to the aspect of birds at sea, or overseas, in *Sea Swallow*. R.N.B.W.S. not being as yet a member of the affluent society the size of our Annual Report is unfortunately limited by our finances. I hope that members at home will still send in reports on land birds, but I would suggest that at the same time reports of special interest might well be forwarded to the Editor of British Birds or to the British Trust for Ornithology, Bird Notes, or local regional representatives.

I express special thanks to those members who have sent photographs. There is a great opening for more photography, coloured or otherwise, of birds at sea or at breeding colonies ashore. Your photographs are usually copied into 2 x 2 inch slides so that the originals and their slides are available in our library.

HERE AND THERE WITH THE BIRDS

Birdwatching at sea brings with it many episodes, which may not in themselves be of much ornithological value, but add much to its interest. I, for one, enjoy receiving these 'tit bits' no end, and have felt that other members may enjoy a few examples too.

I am indebted to Captain C. R. Townshend of M.V. Port Aukland (Port Line Ltd.) for the sketch entitled "Port Aukland Aviary", which came my way from the Meteorological Office.

Many reports on birds extracted from ships' meteorological logs are forwarded regularly to R.N.B.W.S. by the Director and are much appreciated.

THE FLIGHT OF OCEANIC SEA BIRDS

Notes are being maintained, but are rather meagre at the moment, of the characteristic flight pattern of oceanic birds. This type of informa-

tion can only be obtained out in the oceans. We should be very glad of further detailed reports.

PUBLICATIONS BY MEMBERS

"A Sailor's Guide to Ocean Birds, Atlantic and Mediterranean". Bosun Book 18—Stokes and Shackleton—6/-. Allard Coles Ltd., 36 Soho Square, London, W.1.

There are many pocket field guides on British Birds, but these are not what the seafarer is after.

Moreover, nearly all our members come and go, many very regularly, across the waters of the Atlantic and Mediterranean.

The "Sailor's Guide" with Commander Stokes' descriptions and Keith Shackletons' many half tone illustrations of the sea birds on the wing is well worth dipping into, and may put you right on some points you haven't spotted.

G. S. TUCK,

Editor.

OBSERVATIONS OF SEA BIRDS

By W. R. P. Bourne

INTRODUCTION

In the past year Captain Tuck has forwarded new observations by some twenty-five people, one less than the year before, two more than the year before that, so that it appears that the number of our observers is gradually becoming stabilised. The usual names figure prominently in the credit titles; a few are missing, I hope not permanently (I know some members at least are just temporarily ashore), and as usual they are replaced by promising newcomers; we welcome the newcomers and express a hope that old friends will continue to tell us about their more remarkable observations increasingly often.

As usual, most contributions come from the North Atlantic area, from Captain E. F. Aikman, Mr. S. E. Chapman, Ch. Off. W. P. Crone, 2nd Off. R. S. Hawkins, Capt. W. N. H. Jarvis, Ch. Off. K. D. A. Lamb, Capt. D. Stam, Capt. R. Walgate, and Capt. W. E. Williams, with others who also went further afield. Among these, most as usual went on through the Mediterranean to the Indian Ocean, including Ch. Off. J. H. Agnew, Radio Off. E. J. Doyle, 3rd. Off. N. G. Cheshire, Captain W. L. N.



YELLOW-NOSED ALBATROSS

(Note the black bill with yellow line)

Photo by Chief Officer J. H. Agnew



BLACK-BROWED ALBATROSS

(Note the yellow bill)

Photo by Chief Officer J. H. Agnew

Fisken, Radio Off. T. N. Guina, Captain P. P. O. Harrison and his officers, Captain L. F. Howell, Captain J. S. Landers, Lt.-Cdr. E. G. May, and 3rd. Off. J. D. Simon, Captain C. C. Atkinson went to South Africa as well, Captain W. A. Kennedy to the Caribbean and western South America a number of times, Ch. Eng. L. J. Macinnes from the Persian Gulf to Japan, Quartermaster J. G. Worgan crossed the Pacific in a cable-layer, Lt.-Cdr. R. O. Morris went surveying there in H.M.S. Owen, and Lt. N. Morris has supplied a transcript of notes made by the Officers of the Watch during a voyage round the world by the Royal Yacht, "Britannia". The individual voyages will be listed in more detail as the time comes to analyse them.

The quality of the notes continues to improve. The regular observers who produce the main bulk of the notes are producing records of a uniformly high standard now, though from time to time we do still wish that more details and possibly small sketches were provided to substantiate first or unusual records. A steady stream of records is now com-

ing in from practised observers following regular routes, such as Mr. S. E. Chapman, Captain Harrison, Ch. Officer K. D. A. Lamb and Captain Stan in different parts of the Atlantic and Mediterranean, which should in time provide an incomparable picture of normal bird movements. It is also good to be able to report the reception of further isolated observations of unusual phenomena in well-known areas, such as Captain Walgate's reports of concentrations of birds in the Straits of Belle Isle and their behaviour at dusk in the mid Atlantic, and notes from less known regions such as those supplied by Lt. Cdr. R. O. Morris from the West Pacific. I should like to emphasise again that any sort of regular, systematic observation suitable for comparison with past and future records from even the best-known places may prove valuable. If members find they have too little time to keep regular observations in such places, isolated notes of unusual phenomena or from little-known places are always valuable as well.

The main purpose of this review is to provide a first analysis and general conspectus of the main bulk of the reports and to indicate the nature of information available for the individual species of birds recorded. I have tried to quote interesting incidental information concerning the appearance or behaviour of different species, or observations from particular places, as I come across them, while Captain Tuck also selects other notes and reports received for quotation elsewhere in *Sea Swallow*. However, important observations may still escape us and it would be very useful if members (and others) would send to the Editor concise notes of outstanding observations for publication themselves. We hope in time to be able to arrange a system of cross-referencing so that it will be possible for anyone reading this general review of seabird observations to trace any other notes about individual species elsewhere in *Sea Swallow*. It also seems time that *Sea Swallow* had a proper index, starting with a cumulative index to back numbers, and we hope to tackle these problems next.

The most important reflection arising during the past year concerns the design of our report forms. The latest form of the original 'Sea Bird Report Sheet' now seems as satisfactory a model as we can devise for recording isolated observations, providing there are not too many of them, when reports set out in full on this type of form become unduly bulky. We have considered carefully representations from several members and individual initiative by others pressing for the development of longer, narrower forms which will go into small portable typewriters; but the present wide form still seems more satisfactory to us because it leaves plenty of room for notes on the right hand side (it is a pity that this is not used more often . . .). If people have many observations to report, the new 'Sea Bird Census Sheets' seem much more satisfactory than the old report sheets, if only because they save so much paper. However, in the case of the census sheets at least I think that there may be a case for the adoption of long, narrow forms, since few notes are now needed on the face of the form (though do, please, put them on the back . . .), while the lists of species seen during each period of observation are easier to scan if they are arranged in vertical columns down the page than if they are scattered across it. We greatly value members' comments on the design of these forms, and indeed all aspects of our activities, both to show how we can improve our methods, and as an indication that our efforts are appreciated.

Finally, now that I have left Oxford and it is no longer easy for us to work together in analysing the reports, I should like to pay a tribute to

Dr. Mary Radford. Members who read *Bird Study* will be aware of her own analyses of ringing recoveries of British gulls and terns in recent years. When the volume of R.N.B.W.S. sea reports first began to grow to a size difficult to manage she provided great assistance with the task of collating records for analysis, and it is only now when it has proved no longer practicable to arrange for a regular exchange of reports that I have begun to appreciate how much her help lightened the heavy work in the task of analysis. I should also like to express a tribute to a new member of the Society, Captain M. F. J. Mörzer Bruyns. An extremely experienced marine ornithologist of many years standing, and the joint author of a scientific paper on the distribution of the phalaropes in the Arabian Sea among other works, he is a recruit whose name is bound to add lustre to that of our Society. He has provided copies of his records of a very large number of past observations of sea birds to be filed with our own reports in the British Museum (Natural History).

NOTES ON SEA REPORTS RECEIVED IN LATE 1961 AND THROUGHOUT 1962

These notes cover sea reports and censuses received during 1962, with some inadvertently left over from 1961, compiled by the following people, hereafter referred to by their initials:—

Captain C. C. Atkinson, s.s. *Clan Macintosh*. U.K., W. and S.W. Africa, India, Aden, May-November, 1962. 4 pages reports.

Mr. S. Chapman, s.s. *Birmingham City*. Approximately fourteen U.K.-Canada Atlantic crossings, usually Avonmouth-St. Lawrence, with voyages to Churchill, Hudson's Bay, in the late summer, and Halifax, Nova Scotia, in the winter. 10 pages of reports in 1961, 27 in 1962.

3/Off. N. G. Cheshire, m.v. *British Fulmar*. Mediterranean, Red Sea and Persian Gulf, July-November 1961; m.v. *British Osprey*, U.K., Caribbean, Mediterranean, May; Persian Gulf, Arabian Sea, August 1962. 9 pages reports.

Ch. Off. W. P. Crone, s.s. *Queen of Bermuda*. U.K.-New York, March 1962. 1 census sheet.

Radio Off. E. J. Doyle, s.s. *Cape Wrath*. Australian and New Zealand Seas from August 1961, with a voyage to Japan in December, returning to U.K. via South Africa in March 1962. s.s. *Castilian*. U.K. - Mediterranean and return, October - November 1962. 14 pages reports.

Captain W. L. N. Fiske, s.s. *British Signal*. Suez - Persian Gulf and return, October 1961. 5 pages reports in 1961.

Ch. Off. T. F. S. Fripp, m.s. *Lang*. South China Sea and East Indies, August 1961 to May 1962. 2 pages reports and 2 census sheets.

Radio Off. T. N. Guina, s.s. *British Signal*. Germany - Venezuela and return, October to November 1961. U.K. - Persian Gulf,

- January 1962. s.s. British Star. Persian Gulf, Arabian and Red Seas, July to August 1962. 18 pages reports.
- Captain P. P. O. Harrison and the Officers of s.s. Kent. Nine voyages from U.K. (once France) to the Middle East via the Mediterranean (Syria or the Lebanon, once Kuwait), October 1961 to July 1962, December 1962. 24 pages reports 1961, 83 in 1962, with 23 census sheets in 1962.
- Captain L. F. Howell, m.v. Modjokerto. Penang, Colombo, Djibouti, November to December 1962. 3 pages reports.
- Captain W. N. H. Jarvis, m.v. Capulet. Peru, May; Western Europe, August to September, Suez - Persian Gulf and return September to October 1962. 4 census sheets.
- Captain W. A. Kennedy, R.M.S. Tuscany. U.K. - Panama - Peru and Chile and return, August to October 1961, November 1961 to February 1962, March to May 1962, June to September 1962. 5 pages reports in 1961, 10 in 1962.
- Lt. B. F. King, U.S.N., U.S.S. Helena. California, Hawaii, Japan, tropical Pacific, Australia, Hawaii, California, January to June 1960. 31 pages reports received in 1961.
- Ch. Off. K. D. A. Lamb, s.s. Sylvania. Eighteen North Atlantic crossings U.K. to New York by a variety of routes, March to December 1962. 27 pages reports, one census sheet.
- Captain J. S. Landers, m.v. Galle. Observations during numerous voyages between Ceylon, the Persian Gulf and Aden, August 1960 to September 1961. 8 pages reports, received in 1961.
- Ch. Engr. L. J. Macinnes. s.s. Otina. U.K. - Suez, Persian Gulf, April 1962. One page reports.
- Lt. Cdr. E. G. May, R.F.A. Resurgent. U.K., Cape of Good Hope, Aden, February to March 1962. 4 pages reports.
- Captain J. B. Mitchell, m.v. Weirbank. New Guinea, Singapore, Aden, U.K., March to April 1962. 5 pages reports.
- Lt. Cdr. R. O. Morris and the crew of H.M.S. Owen. U.K., Azores, Gibraltar, Azores, West Indies, South Trinidad, Rio de Janeiro, Rio de la Plata, Simonstown, Gough Id., S. Georgia, Falkland Is., Rio de la Plata, Ascension, Freetown, U.K., September 1960 to May 1961. 28 pages reports.
- R.O.1 W. G. Peachey, R.F.A. Brown Ranger. Observations in harbour, Malta, December 1961. 2 pages reports.
- Mr. A. Semple, m.v. Port Phillip. U.K., Panama, Suva, New Zealand and return. November 1961 to March 1962, 13 pages reports.
- Captain D. Stam, s.s. Joseph Frering. Eight voyages between Holland and Liberia, August 1961 to December 1962. 1 page reports 1961, 10 pages reports and 4 census sheets 1962.
- Captain R. Walgate, s.s. Beaverglen, U.K., St. Lawrence and return, December 1961. s.s. Beavardell, Montreal to Rotterdam, July to August 1962. 5 pages reports.
- Quartermaster J. G. Worgan, H.M.T.S. Monarch. U.K., Panama, Tahiti, Suva, New Zealand, Panama, U.K., September to December 1962. 7 census sheets.

Captain W. E. Williams. Europe, West and South Africa and return,
April to June 1962. 3 pages reports.

The notes left over from 1961 included some 84 pages of reports covering ten voyages by seven observers (there were erroneously reported to be 95 pages last year); in addition some 268 pages of reports and 42 census sheets were sent in by 22 observers in 1962, and I hope we are now up-to-date to the end of 1962. The total number of voyages involved in 1962, at least eighty, is certainly higher than in 1961. As a result of the introduction of the Census Forms the number of Report Sheets received has been almost exactly halved; but the general impression obtained by scanning all the observations is that despite the fall in the amount of paper used members are still continuing to collect with increasing efficiency a steadily rising amount of useful information. Some members are managing to get at least six times as much information on to a census sheet as they did on to a report form, which could be accounted progress in this age of form-filling. The labour involved in analysing the observations has been reduced almost in proportion.

The information supplied includes the usual vast and growing mass of observations whose full significance will only become apparent when they are all plotted on maps. Also the usual fringe of remarkable records, ranging from the first description of a live Matsu-deira's Storm-petrel that I remember seeing, through other records which would have been equally remarkable if only comparable descriptions had been attached, to descriptions which help to illuminate how people make mistakes, if nothing else. I have tried to follow a middle course in analysing all this material, quoting a wide enough range of records to show the full variety submitted (although some are certainly far from new), all the outstanding ones I have noticed with substantiating evidence where it has been provided and seems important or interesting (too often still it is lacking), and a sufficient number of the more interesting routine records at least to indicate what they are like and what may in time be done with them.

NOTES ON SPECIES

PENGUINS (*SPHENISCIDAE*)

Still few records, none adding greatly to previous information. B.F.K. was shown large young Little Penguins (*Eudyptula minor*) on Phillip Island near Melbourne, Australia, on 6th January, 1960.

ALBATROSSES (*DIOMEDEIDAE*)

Wandering Albatross (*Diomedea exulans*). In the eastern South Atlantic C.C.A. saw them south from 22°54'S. 12°29'E. on 26th May, 1962, and W.E.W. south from 27°40'S. 13°16'E. on 24th April, 1962. Further west they were reported from H.M.S. Owen (R.O.M.) from 26°40'S. 46°30'W. on 14th December, 1960, south to 54°08'S. 43°30'W. on 8th April, 1961, then north again to 30°10'S. 32°00'W. on 30th April, 1961. A.S. did not find them very common along the east coast of New

Zealand in January 1962, and saw the last sailing north at 33°45'S. 141°38'W. on 4th March, 1962, while J.G.W. saw the last at 32°54'S. 161°36'W. on 6th November, 1962. B.F.K. found them very common with a few following the ship constantly off the east coast of Australia from 70 miles SE of Sydney to Melbourne and back in May 1960.

Waved Albatross (*Diomedea irrorata*). One seen by W.A.K. at 07°14'S. 80°37'W. on 27th July, 1962.

Black-footed Albatross (*Diomedea nigripes*). B.F.K. saw one or two following the ship most of the way from the U.S. to Hawaii, found them numerous around Hawaii, saw them frequently on the way to Japan and occasionally off Japan in January 1960, and encountered them often again on the return trip in May. E.J.D. saw probable birds at 28°46'N. 145°59'E. and 34°09'N. 144°31'E. on 17th and 18th December, 1961.

Laysan Albatross (*Diomedea immutabilis*). B.F.K. saw them almost daily en route from California to Japan via Hawaii in January 1960, and occasionally off Japan. E.J.D. saw a possible bird at 37°95'N. 143°01'E. on 19th December, 1961, another at 36°31'N. 144°59'E. on 31st December, and two at 31°05'N. 148°19'E. on New Year's Day, 1962.

Black-browed Albatross (*Diomedea melanophris*). In the eastern South Atlantic E.G.M. saw them south from 33°34'S. 16°38'E. on 3rd March, 1962, and to the west they were seen from H.M.S. Owen (R.O.M.) from 35°20'S. 54°00'W. on 18th December, 1960, south to 51°30'S. 54°45'W. on 12th April, 1961, where there were forty, and north to 35°08'S. 53°49'W. on 26th April, 1961. Fifty to a hundred were seen at 38°45'S. 44°20'W. at night on 16th April, 1961. A.S. did not find them very common along the east coast of New Zealand in January 1962, but B.F.K. found them even commoner than Wandering Albatrosses off the east coast of Australia between Sydney and Melbourne in May 1960, with up to thirty or forty in the wake.

Shy Albatross (*Diomedea cauta*). C.C.A. saw five or six off SW Africa at 17°04'S. 11°05'E. and 22°54'S. 12°29'E. on 25th and 26th May, 1962, the first group with whales, and W.A.K. reported two in the Indian Ocean at 16°26'S. 73°25'E. on 1st August, 1962. A.S. saw this bird or Buller's Albatross (*Diomedea bulleri*) mainly just south of Wellington off the east coast of New Zealand in January, 1962, while B.F.K. saw thirty about 30 miles SSW of Cape Everard, ten in Port Phillip Bay, and fifteen 30-50 miles from land south of Cape Howe off SE Australia on 3rd to 10th May, 1960. He reports that this species is easily differentiated from the Black-browed by the entirely white underwing (except at the tip), the grey, yellow-tipped bill, and the grey rather than black back. A number of people seem to be overlooking this species and Buller's Albatross, which is very like it.

Yellow-nosed Albatross (*Diomedea chlororhynchos*). W.E.W. saw the first four going south in the eastern South Atlantic at 26°33'S. 12°22'E. on 24th April, 1962, and E.G.M. saw twenty at 33°34'S. 16°38'E. on 3rd March, 1962. They were seen from H.M.S. Owen from 37°00'S. 54°31'W. north to 33°20'S. 41°30'W. on 28th April, 1961 (R.O.M.). B.F.K. saw one 8 miles east of Sydney Heads, east Australia on 11th May, 1960; he describes it as "an immense, dark-backed albatross with a white head and underparts. It had a black border to the underwing narrower than that of a Black-browed Albatross it was with, and wider than that of a Shy Albatross. The bill was black with a yellow line down the centre of the upper mandible."

Grey-headed Albatross (*Diomedea chrysostoma*). B.F.K. saw one just outside Port Phillip Bay, Australia, on 9th May, 1960. He describes it as "a very large albatross, upper parts dark, lower parts white, with a narrow black border to the lower surface of the wings, the head grey, and the bill dark, appearing as large as Black-brow's, rather than slightly smaller, as with the Yellow-nose."

Sooty Albatross (*Phoebastria fusca*). A possible bird seen from H.M.S. Owen at 44°20'S. 17°20'W. on 8th February, 1960 (R.O.M.).

Light-mantled Sooty Albatross (*Phoebastria palpebrata*). Occasionally individuals seen from H.M.S. Owen from 51°00'S. 30°45'W. to 54°08'S. 43°30'W. on 2nd to 8th February, 1960 (R.O.M.).

TRUE PETRELS (*PROCELLARIIDAE*)

Giant Petrel (*Macronectes giganteus*). Seen from H.M.S. Owen from 44°20'S. 17°20'W. on 10th February, 1960, south to 47°05'S. 61°25'W. on 13th April, 1961 (R.O.M.), by B.F.K. in the Tasman Sea thirty miles east of Green Cape, East Australia, in May 1960, and A.S. reports three or four usually present all along the east coast of New Zealand in January 1962, often on the water in the harbours. The bird seen by B.F.K. was all dark and presumably a juvenile; there are few other notes of the appearance of the birds seen, and we need more of these to determine how far north the paler adults and the birds in the white phase migrate. It seems likely various birds reported with inadequate descriptions from low latitudes as "Sooty Albatrosses" from time to time may be dark young Giant Petrels; apart from anything else, the albatrosses have relatively slender, mainly dark bills, and the Giant Petrels massive, paler bills; the manner of flight of the petrels and albatrosses is also very different.

Pintado Petrel (*Daption capensis*). Seen from H.M.S. Owen (R.O.M.) in the far south between 54°08'S. 43°30'W. and 48°27'S. 61°00'W. on 8th to 13th April, 1961, by W.A.K. off Bahia Arica, Chile, and at 28°10'S. 71°30'W. on 4th and 7th August, 1962, by A.S. mainly near Bluff off the east coast of New Zealand in January 1962, and by B.F.K. thirty miles off Cape Howe, east Australia, in May 1960.

Northern Fulmar (*Fulmarus glacialis*). R.W. saw over a thousand with Great and Sooty Shearwaters in the Strait of Belle Isle when leaving the St. Lawrence on 30th July, 1962; some were on the water, and some on an iceberg. S.C. noticed one had moulted several primaries at 53°N. 20°12'W. in the eastern North Atlantic on 22nd June, 1961, and R.W. noticed that Fulmars (and Kittiwakes) which followed the ship by day left it at night even with moonlight in mid-Atlantic in December 1961. B.F.K. saw one in the North Pacific at 40°00'N. 143°54'E. on 22nd February, 1960.

Southern Fulmar or Silver-grey Petrel (*Fulmarus glacialoides*). W.A.K. saw fifteen off Bahia Arica, Chile, on 4th August, 1962. They were seen from H.M.S. Owen between 53°18'S. 52°10'W. and 48°27'S. 61°00'W. on 9th to 13th April, 1961.

Prions (*Pachyptila* sp.). Parties of up to thirty seen from H.M.S. Owen (R.O.M.) between 51°00'S. 30°45'W. and 42°30'S. 14°00'W. on 2nd to 7th February, 1961, were presumably Dove Prions (*P. desolata*). A.S. saw single birds scattered along the east coast of New Zealand, becoming common north of Bluff, in January 1962 which were probably Fairy

Prions (*P. turtur*), and over a hundred of these were seen off Port Phillip Bay and from about 30 miles south of Cape Howe to 40 miles east of Bermagui in the Tasman Sea by B.F.K. on 9th to 10th May, 1960.

White-chinned Petrel (*Procellaria aequinoctialis*). E.G.M. saw ten off South Africa at 33°34'S. 16°38'E. on 3rd March, 1962, and others were seen from H.M.S. Owen (R.O.M.) between 51°00'S. 30°45'W. on 2nd February, 1961, and 33°20'S. 41°30'W. on 28th April, 1961.

White-faced Shearwater (*Puffinus leucomelas*). B.K.F. saw over 500 flying NW at 31°59'N. 136°02'E. between Okinawa and Tokyo on 28th March, 1960, and over 2,000 flying NW at 33°14'N. 137°35'E. on 4th April, 1960, also twenty at 34°42'N. 140°57'E. on 16th April, 1960, and two in the winter quarters at 10°49'S. 154°30'E. on 28th April, 1960. He describes the latter as medium-sized shearwaters, brown above with a brown nape but the cheeks and forehead white, and white below, including the underwing. They were not close enough to see if the face was streaked, but he never saw this satisfactorily in the similar birds seen off Japan either.

Cory's (or the Mediterranean) Shearwater (*Puffinus kuhlii*=*P. diomedea*). Numbers were recorded off western Europe and in the Mediterranean in the northern summer; P.P.O.H. saw over 500 at 37°24'N. 10°19'E. off Tunisia on 5th July, 1962, and at 36°54'N. 12°46'E. off Pantellaria on 12th July, 1960, and about 250 at 37°19'N. 08°21'E. off Algeria on 24th May, 1960. N.G.C. saw numbers off Cape Farisia, Tunisia, on 29th July, 1961, off Cape Matapan on 1st August, 1961, and more flocks from there to the Piraeus; also more at 37°20'N. 10°26'E. off Tunisia on 17th August, 1961, and over 400 off Tarifa next day. Further south, D.S. saw them off West Africa throughout the year, with many at 09°45'N. 16°01'W. on 19th April, 1962, and others north to 28°26'N. 15°05'W. on 27th April; many at 13°35'N. 17°29'W. on 8th June, 1962, forty at 09°15'N. 15°23'W. next day, and others north to 41°14'N. 10°22'W. on 20th June; five at 14°24'N. 17°46'W. on 2nd September, 1961, and one at 19°52'N. 17°37'W. on 10th September, 1962; many at 15°15'N. 17°55'W., 07°14'N. 12°15'W. and 15°03'N. 17°35'W. on 22nd, 24th and 28th November, 1962; one at 31°05'N. 14°09'W. on 24th November, 1962; 100 at 11°33'N. 17°25'W., 60 at 08°00'N. 14°00'W., 200 at 04°40'N. 15°01'W. and two at 24°35'N. 16°16'W. on 10th, 11th, 14th and 18th December, 1962. T.N.G. also saw 100 unusually far north at 41°36'N. 25°24'W. on 6th November, 1961, while in the South Atlantic twelve were reported from H.M.S. Owen without details (there might be confusion with Brown Petrels (*Adamastor cinereus*)) at 23°00'S. 42°00'W. on 7th December, 1960 and 15 in all between 34°53'S. 47°53'W. and 26°55'S. 26°52'W. on 27th April-2nd May, 1961. Put together, these records agree with the recognised pattern of concentration off breeding stations in the Mediterranean and Atlantic Islands in the northern summer; perhaps most on passage off West Africa in spring and autumn but some birds here throughout the year; and a movement into the South Atlantic in the northern winter and early spring.

Greater Shearwater (*Puffinus gravis*). Even more records than for the preceding species. None till April, when they were seen at intervals in the South Atlantic from H.M.S. Owen (R.O.M.) between 54°08'S. 43°45'W. on 8th April, 1961 (white nape and rump described) and 35°08'S. 53°49'W. on 26th April, 1961. The first four birds appeared at 14°36'N.

17°34'W. off West Africa on 18th April, 1962 (D.S.) and the first bird appeared at 48°57'N. 07°19'W. to the north on 29th April, 1962 (P.P.O.H.). Thirty were seen by K.D.A.L. at 47°N. 32°W. on 1st May, 1962, and N.G.C. reported many between 44°05'N. 19°05'W. and 17°52'N. 52°W. during 8th-22nd May, 1962. From then onwards they became common over the northern North Atlantic, while D.S. still recorded hundreds off West Africa at 09°15'N. 15°23'W. on 9th June, 1962; on 30th July, 1962 R.W. saw over five thousand with Sooty Shearwaters and Fulmars in the Strait of Belle Isle when leaving the St. Lawrence, while on 20th August, 1962 S.C. saw eighteen at 60°39'N. 61°45'W. while making for the Hudson's Bay. He saw another two to three hundred at 58°40'N. 46°32'W. on 22nd September, 1962 K.A.L. recorded very many at 51°30'N. 14°04'W. on 1st October, 1962, and W.A.K. found them numerous between 41°52'N. 32°00'W. and 46°55'N. 20°09'W. on 15th-17th October, 1961 as the birds moved south. A number were recorded into November, including thirty and fifty at 44°39'N. 17°10'W. and 41°36'N. 25°24'W. on 5th-6th November, 1961 (T.N.G.), thirty at 47°28'N. 06°04'W. on 10th November, 1961 (P.P.O.H.), and parties of up to thirty off West Africa between 20°17'N. 17°26'W. and 10°29'N. 16°38'W. on 21st-23rd November, 1962 (D.S.). The last recorded in the North Atlantic was one seen in moult in this last region by D.S. at 21°47'N. 17°10'W. on 8th December, 1962; one was seen from H.M.S. Owen in the South Atlantic at 37°00'S. 40°30'W. on 30th December, 1960. These records also agree with the recognised pattern of movement, with a massive migration north in the western Atlantic in May, a great concentration in Canadian and Greenland waters at mid-summer, and a more diffuse southward movement in mid ocean further east in autumn. The regular appearance of birds off West Africa from April to November including large numbers in June is new, however, and birds were recorded in unusual numbers in Belle Isle then.

Pale-footed Shearwaters (*Puffinus carneipes*). A.S. found them numerous along the east coast of New Zealand in January, 1962, especially just south of Auckland. In the Indian Ocean T.N.G. saw at least six at 25°12'N. 59°13'E. on 29th July, 1962, and over a thousand with at least one Wedge-tailed Shearwater off Ras Madraka at 18°45'N. 57°51'E. on 11th August, 1962; W.L.N.F. saw over fifty at 15°02'N. 51°43'E. on 5th Oct., 1961, and N.G.C. at least 250 in a loose flock swooping and circling low over the surface of the sea in the approaches to the Persian Gulf on 9th October, 1961. These records continue to reinforce the information indicating a very large build-up of these birds, probably including the whole Australian population, along the northern coast of the Arabian Sea in the northern autumn, comparable to the build-up of other shearwaters off the west coasts of Europe and North America at this season. It would help if records of this species were accompanied by descriptions.

Wedge-tailed Shearwater (*Puffinus pacificus*). T.N.G. reported up to a hundred in a day scattered along the south coast of Arabia in July-August 1962. In the South Pacific, B.F.K. saw small-medium all dark shearwaters off the east coast of New Ireland at 03°24'S. 153°03'E. on 27th April, 1960, at 10°49'S. 154°30'E. next day, 22°12'S. 153°49'E. on 30th April, 1960, and at 24°39'S. 166°17'E. on 18th May, 1960, with others in the distance from there until he reached Hawaii on 26th May, 1960. A.S. also saw possible birds at 15°12'S. 167°37'W., 16°16'S. 174°27'W., 17°31'S. 179°22'E. and 24°10'S. 177°28'E. on 15th, 17th, 18th

and 24th December, 1961. B.F.K. saw some 200 birds in the light phase with three dark ones off Pearl Harbour, Hawaii, on 27th May, 1960; the pale phase birds were brown above and white below with black primaries, brown cheeks, a white throat and the underwing white with a black edge; the tail was long and wedge-shaped and the bill yellowish. The dark birds differed mainly in lacking the light areas. The pale birds should be easy to distinguish from the local race of Manx Shearwater (*Puffinus puffinus newelli*) recently rediscovered in these waters by their pale bills, long wedge-shaped tails and manner of flight; while the dark-phase birds should be distinguishable from Flesh-footed and Christmas Shearwaters which occur in much the same area of the Pacific by their longer, wedge-shaped tails and manner of flight as well.

Grey-backed Shearwater (*Puffinus bulleri*). When approaching New Zealand from Panama A.S. met the first possible bird at 24°10'S. 177°28'E. on 24th December, 1961, and found many at 30°31'S. 178°21'E. and 36°59'S. 178°37'E. on 25th and 26th December, 1961. He saw them along the east coast of New Zealand between Wellington and Auckland in January 1962, and occasional birds until 39°50'S. 179°05'W. on 28th February, 1962, during the return voyage. He describes them as large shearwaters with long, drooping wings which were not shy and often made straight for the ship, flapping and gliding low over the water as they flew alongside.

Sooty Shearwater (*Puffinus griseus*). In the North Atlantic, D.S. saw the first at 09°45'N. 16°01'W. off West Africa on 19th April, 1962, three at much the same place (09°15'N. 15°23'W.) on 9th June, 1962, and another possible bird at 15°19'N. 17°36'W. on 9th September, 1962; these are amongst the first records for this region. Further west, N.G.C. saw two birds at 26°19'N. 51°48'W. and again at 22°15'N. 57°42'W. on 13th and 14th May, 1962, and S.C. saw several off the east coast of Canada between June and August, 1962, where R.W. reports over a hundred feeding with Great Shearwaters and Fulmars in the Strait of Belle Isle on 30th July, 1962; one which dived was seen swimming with its wings 6-10ft. beneath the surface, later taking off like a Polaris missile when it came to the surface. In the Pacific A.S. saw a possible bird at 03°43'N. 91°13'W. on 3rd December, 1961, possibly on a delayed return migration south, and thousands off the breeding stations around Stewart Island in January 1962.

Sooty or Short-tailed Shearwaters (*Puffinus griseus* or *P. tenuirostris*). B.F.K. saw numbers of these birds, doubtless including both species, in the Pacific, but despite his considerable experience very wisely thought it better not to pretend to be able to tell them apart in the distance. He met the first at 10°49'S. 154°30'E. on 28th April, 1960, the next two at 22°12'S. 153°49'E. on 30th April 1960, and others 40 miles E. of Cape Evans, 30 miles SSW of Cape Everard and 30 miles south of Cape Howe, SE Australia, on 1st, 3rd and 10th May, 1960. Sailing north again, he saw birds on northward migration at 04°00'S. 177°37'W. on 21st May, 1960, fourteen at 01°27'N. 174°32'W. on 22nd May, 1960, at 07°20'N. 169°50'W. on 23rd May, 1960, and 28°20'N. 140°45'W. on 29th May, 1960. He describes them all as medium, all-dark shearwaters with various shades of silvery or grey wing-linings. All except the last seem marginally more likely to be Short-tailed Shearwaters.

Christmas Shearwater (*Puffinus nativitatis*). B.F.K. identified as this species fifty small-medium brown shearwaters with slender black bills seen at 06°30'N. 170°36'W. on 23rd May, 1960, and A.S. two or three brown

petrels with rather short, straight wings and a shearwater flight seen at 25°46'S. 123°09'W. on 7th March, 1962. There is still an urgent need for good descriptions of the appearance of this bird at sea; by analogy with allied species and from its skins it seems likely that it will appear a small-medium dark-brown shearwater with a short, dark, slender bill, a short tail but longish wings, which occurs in flocks offshore and spends much time on the water, often diving.

Manx Shearwater (*Puffinus puffinus*). Among other records, S.C. reports three well out in the North Atlantic at 57°02'N. 31°15'W. on 19th September, 1961; D.S. many off Ushant (where he usually sees them in summer) on 12th April, 1962, and four flying SE fast (perhaps on southward migration?) at 30°16'N. 14°34'W. on 14th September, 1962, and P.P.O.H. saw over 500 off Cape Sacratif, 26 miles from Gibraltar at 36°16'N. 03°37'W., on 14th July, 1962. B.F.K. reports two of the Hawaiian race (*P. p. newelli*, once thought to be extinct) at 19°52'N. 159°33'W. and again at 20°10'N. 159°05'W. off the Hawaiian main chain on 26th May, 1960. He describes them as "small medium shearwaters, almost black above and all white below except for a narrow black border to the underwing and white edges to the upper tail coverts. The only other possibility in this area, the pale phase of the Wedge-tailed Shearwater, is brown rather than black above, and does not have as rapid a wing-beat."

Fluttering Shearwater (*Puffinus (puffinus?) gavia*). A.S. found them numerous one day north of Bluff, east New Zealand, in January 1962; B.F.K. saw seven 80 miles east of Wilson's Promontory, Bass Strait, Australia and eight five miles east of Sydney Heads on 3rd and 11th May, 1960. He describes them as small-medium shearwaters which were very dark above and white below and had a rapid flight similar to that of the Manx Shearwater; he was not sure that he could distinguish this form from the Little Shearwaters either in the absence of something with which to compare the size. A.S. commented that the flight consisted of a flutter with occasional glides and that the upperparts sometimes showed some white, especially around the first primary; according to skins they bleach unusually freely. Many more notes are needed on similarities and differences in the flight and appearance of this bird and the other Manx and Little Shearwaters to help determine its true relationships and how it should be identified in life.

Little Dusky and Audubon's Shearwaters (*Puffinus assimilis* and *P. therminieri*). These are usually treated as two species but the only difference between the two is that the birds breeding in the tropics are browner above and more heavily marked, which is usual in tropical forms, and it seems doubtful whether they deserve to be separated, especially since it is often difficult or impossible to tell them apart at sea. Off West Africa D.S. saw two and then one at 19°57'N. 17°31'W. and 14°36'N. 17°34'W. on 17th-18th April, 1962; R.O.M. saw two possible birds at 02°10'N. 14°30'W. on 11th May, 1961, and C.C.A. saw many in two flocks at 09°55'N. 17°08'W. on 16th May, 1962, and a few at 06°31'N. 13°22'W. next day, feeding with Mackerel and porpoises on shoals of small fish. Further north, D.S. reports one off Iberia at 42°00'N. 10°00'W. on 28th August, 1962. In the Caribbean area N.G.C. reports a flock of twenty in the Sombrero Passage at 18°37'N. 63°27'W. on 15th May, 1962, and W.A.K. saw one at 07°00'N. 78°32'W. on 19th July, 1962, and a possible large raft on the water at 06°35'N. 78°30'W. on 7th December, 1961. The birds in the Sombrero passage were landing and taking off again

repeatedly, diving freely, which sounds as if they were also feeding on a shoal of fish. In the Pacific A.S. saw two possible birds (brown above, paler than a Manx Shearwater, white below, banking high on stiff wings . . .) at 05°48'S. 122°18'W. on 27th November, 1961, another at 00°46'S. 80°08'W. on 14th March, 1962, and three possible examples of one of the southern races at 33°45'S. 141°38'W. on 4th March, 1962, described as "small to medium in size, looking like landbirds as they always flapped and never glided, sometimes high, and sometimes hovering close to the sea. They stayed together and followed the ship at mast height for a while with fairly quick wing-beats. Upperparts dirty slate-grey or grey-brown, almost disappearing from view against the sea; underparts dull whitish with possible brownish edges to wings; general flight and behaviour rather like Fluttering Shearwaters seen off New Zealand." B.F.K. also saw five small shearwaters of one of the southern races in the Tasman Sea at 29°41'S. 157°14'E. on 17th May, 1960, which he described as "black above and white below with a very rapid flight, frequent flapping and little sailing . . . they seemed smaller than Fluttering Shearwaters, and are listed as Dusky Shearwaters because of the position close to the nesting grounds, but considering how tricky sizes are at sea I wouldn't depend on them for identification unless there was something close by for comparison. . . ."

Great-winged Petrel (*Pterodroma macroptera*). Ten were seen at 33°34'S. 16°38'E. off South Africa on 3rd March, 1962, by E.G.M., and J.A.F.J. reported a bird which appears to be this species on board in the Tasman Sea at 36°07'S. 166°41'E. on 11th November, 1961. B.F.K. reports over 500 during two hours about 40 miles east of Evans Head, New South Wales, on 1st May, 1960, and over 200 40-60 miles offshore 70 miles SW of Sydney, east Australia, next day, with four 40 miles east of Bermagui, east Australia, on 10th May, 1960, and thirty seen 20 miles out of Sydney Harbour on 16th May, 1960; these are described as "medium sized petrels, all sooty brown except for a grey or whitish patch around the bill and a grey base to the primaries and outer secondaries . . . they flew like big swifts; most just passed by, but a few followed us. One Solander's Petrel was seen with them on 1st May."

White-headed Petrel (*Pterodroma lessonii*). Four seen by B.F.K. 40-60 miles offshore 70 miles SW of Sydney, east Australia, on 2nd May, 1960. Described as medium-sized petrels with dark grey wings above and below, a grey hind-neck, black patch around the eye, and the rest white, including the tail, rather like a miniature albatross in their colouration.

Schlegel's Petrel (*Pterodroma incerta*). Essentially a dark South Atlantic representative of the *lessonii-incerta* group. Up to ten seen from H.M.S. Owen (R.O.M.) from 31°00'S. 48°00'W. on 15th December, 1960, south to 44°20'S. 17°20'W. on 10th February, 1961, and then north to 28°38'S. 29°50'W. on 1st May, 1961.

Solander's Petrel (*Pterodroma solandri*). This appears to be a grey Tasman Sea representative of the *lessonii-incerta* group of gadfly petrels. One seen with Great-winged Petrels by B.F.K. about 40 miles east of Evans Head, New South Wales, on 1st May, 1960; described as an all dark petrel with a grey patch around the bill and a large light-grey patch at the base of the primaries. At close range its plumage, especially the back, was a frosty grey which contrasted markedly with the dark brown of the Great-winged Petrels watched during the previous two hours.

Tahiti Petrel (*Pterodroma rostrata*). B.F.K. reports six possible birds at 10°49'S. 154°30'E. on 28th April, 1960, and three at 23°50'S. 167°26'E. on 18th May, 1960. The first are described as small to medium petrels which were dark above with an entirely dark head and upper breast, a white breast and belly, and a greyish underwing which appeared to have a lighter grey streak up the centre. The others are described as small-medium petrels which were brown above and white below with a dark throat and upper breast and a dark underwing. The first description agrees well with this species except that the underwing probably appears dark in life; birds which are browner above with dark underwings as in the second description might be Phoenix Petrels, which are rather similar to Tahiti Petrels but browner above and more lightly built, occur over cooler waters, and sometimes have paler chins. Despite the paler underwing the first records at least sound reasonably reliable, the second perhaps rather less so.

Phoenix Petrel (*Pterodroma alba*). B.F.K. reports a single bird which does appear to be this species from 05°30'N. 171°09'W. on 20th May, 1960. It is described as a small-medium brown petrel with the throat, upper breast and underwing dark but the lower breast and belly white. A.S. saw two possible birds at 12°58'S. 154°19'W. on 13th December, 1961, which are described as fairly large and brown above with a white abdomen and upper breast but a dark underwing.

Trinidad or Herald Petrel (*Pterodroma arminjoniana* and *P. a. heraldica*). A.S. saw three possible birds at 09°34'S. 134°51'W. on 10th December, 1961, and another at 11°07'S. 141°11'W. next day in the Pitcairn area. They were chocolate brown above, with a pale forehead and white body, the underwing dark but paler than the upperwing, and darker at the edges. They had a manner of flight not unlike Audubon's Shearwater, flapping and gliding, but without the noticeably slim, long wings of shearwaters.

Kermadec Petrel (*Pterodroma neglecta*=*P. phillipii*). B.F.K. saw twelve petrels which might have been the dark phase of this species at 28°40'S. 158°20'E. in the Tasman Sea on 17th May, 1960. They did not come very close, but as far as could be seen appeared uniformly brown with a white patch at the base of the primaries but no white about the head. A.S. saw another possible dark-phase bird at 11°53'S. 102°17'W. on 11th March, 1962; it was also dark brown, with large pale blotches of greyish-white on the underwing extending out towards the tip of the primaries, and a less distinct white mark on the upper side of the wing. It was a large bird with proportionately short wings which flew with a slow flap-and-glide type of flight. These birds could also, of course, have been a number of other things, including Southern Great Skuas, which have white marks near the tip of the wing rather like dark Kermadec Petrels.

Peale's Petrel (*Pterodroma inexpectata*). B.F.K. saw one at 23°50'S. 167°26'E. on 18th May, 1960. It flew right beneath the bow, and appeared a small-medium petrel, dark grey above and white below, with a scaly, grey-capped head and a dark band across the belly and lower breast. The wings were white beneath with a broad dark band along the leading edge.

Hawaiian and White-necked Petrels (*Pterodroma phaeopygia* and *P. externa*). These forms are certainly very closely related to each other and to the Black-capped and Bermuda Petrels (*P. hastata* and *P. cahow*)

and it is debateable whether they should all be treated as subspecies of Capped Petrel. B.F.K. had a poor view of a Hawaiian Petrel at 07°45'N. 169°35'W. at dusk on 23rd May, 1960, and a good view of one 20 miles east of Oahu, Hawaii, on 27th May, 1960. They appeared medium sized petrels, dark above and white below with most of the head white except the crown, nape and round the eyes, the wings and back brown with the flight feathers darker, and the whole underparts and underwing white except for a dark border around the underwing. A white-necked Petrel seen at close range by B.F.K. at 13°50'S. 175°50'E. on 20th May, 1960 was also medium sized, grey above and white below, with the top of the head and area round the eye dark, a broad white collar extending round the neck, black primaries, and a short, dark mark extending on to the side of the breast from the leading edge of the wing. A.S. provides a rather similar description of another bird seen at 25°46'S. 123°09'W. on 7th March, 1962, reporting that the upperparts were greyish, the upper wing dark brown, the tail greyish with some white showing at the extreme tip, and that the white collar was equally prominent. These birds seem rather distinctively marked, the main difference between them being that the Hawaiian Petrel is darker above and more heavily marked, lacking the white collar found in the White-necked Petrel.

Bonin and Black-winged Petrels (*Pterodroma hypoleuca* and *P. (hypoleuca) nigripennis*). These two forms, as I pointed out in 1961, appear to be small northern and southern derivatives of the "Capped" (*P. hasitata*) group of petrels occurring over rather colder surface waters and breeding at least to some extent in the winter, so that they occupy much the same relation to the Capped Petrels that the Little Shearwaters do to the Manx Shearwaters. The northern form, the Bonin Petrel proper (*P. hypoleuca*), was long regarded as a race of Gould's Petrel, and the southern form, the Black-winged Petrel (*P. nigripennis*) as a race of Cook's Petrel, until in 1942 Dr. R. A. Falla separated them as races of a distinct species *P. hypoleuca* ('Emu' 42:111). In the course of a review of Captain Harrison's "Sea Birds of the South Pacific" Dr. Falla now identifies the lower bird figured facing p.75 as the Black-winged Petrel, and suggests it should be treated as a separate species ('Ibis' 105:410); there appears to be at least as good an argument in favour of this as in favour of treating the Hawaiian and White-necked Petrels as separate species, though the smaller species but not the larger ones are lumped together by W. B. Alexander; however, since Dr. Falla's earlier decision to combine these two forms in one species has been followed so widely it seems better for us to keep to it now until any further changes he proposes have become more firmly established.

B.F.K. saw a Bonin Petrel at 23°35'N. 171°14'W. on 18th January, 1960, and eight probable ones at 23°17'N. 139°56'E. near the Volcano Islands on 19th April, 1960. He describes them as grey above with a black W across the wings, a dark mark on top of the head and around the eye, a black mark on the side of the breast below the leading edge of the wing, and a white face, underparts and underwing, the latter with a dark border (on this basis the description is inadequate to differentiate these birds from members of the 'Cookilaria' group, discussed later; but the date of the first record in particular suggests the identification is right). A.S. saw birds which appear to have been Black-winged Petrels in numbers at 39°50'S. 179°08'W. when leaving New Zealand on 28th February, 1962, and in decreasing numbers until 35°41'S. 148°53'W. three days later, with another at 11°53'S. 102°17'W. on 11th March,

1962. He describes them as small petrels of the gadfly type with a forceful flap-and-glide flight, darkish grey-brown above with the primaries darker still, an indistinct dark inverted W across the back, and a paler rump but darker tail-tip, a dark area around the eye, a white face and underparts, and a white underwing with dark borders. On the first day some birds were a relatively pale grey above, and may have belonged to the pale race *axillaris* from the Chatham Is.; with the last bird he noticed the most distinctive character of this southern group of races, the presence of a relatively broad dark band along the leading edge of the underwing (well shown in the picture facing p.75 in Captain Harrison's book).

Cook's, Stejneger's, and the Collared Petrels (*Pterodroma cookii*, *P. longirostris*, and *P. leucoptera* (including *P. l. brevipes*)). We also have a number of possible records of members of this group of closely-related, extremely similar species, the "Cookilarias", also discussed in 1961. A.S. saw a possible Cook's Petrel at 24°10'S. 177°28'E. on 24th December, 1961; it was greyish above, with the primaries and wing coverts darker forming a conspicuous inverted W across the back, a dark mark by the eye, a white face and underparts, a white underwing with a dark border, and it flapped much in flight. Other birds seen by A.S. at 36°59'S. 178°37'E. on 26th December, 1961 and 11°53'S. 102°17'W. on 11th March, 1962 could have been Stejneger's Petrels; the first was smallish, darkish above with darker primaries and white underparts; the second similar to a Black-winged Petrel seen the same day, but with both edges of the underwing dark. B.F.K. also saw two possible Stejneger's Petrels at 16°35'N. 162°26'W. on 25th May, 1960; they are described as much the same size as Bulwer's petrels seen at the time, with the wings completely dark except for the ends of the outer secondaries, and the back and upper tail coverts greyish with a narrow black line across the wing and lower back, completing an appearance of a W-type wing-pattern. There was a narrow streak of white around the innermost primary (possibly a result of moult?), and the tail, crown, and area around the eye were black, although there was no dark patch at the side of the breast as in the Bonin Petrel. The bill was black, and there was much less white in the wing than in Cook's Petrels seen off California; they had a floppy, moth-like flight similar to a Prion. B.F.K. also saw a dozen reasonably certain Gould's Petrels at 23°50'S. 167°26'E. on 18th May, 1960; they were rather small, grey above and white below, with dark primaries and crowns; the side of the head, forehead and underparts were white, and the underwing white with a black border. They had at least a partial grey band across the upper breast. A.S. also saw possible Gould's Petrels at 03°43'N. 92°13'W. on 3rd December, 1961 and 12°58'S. 154°19'W. on 13th December, 1961. The first was dark above and white below, darker across the back and wing coverts, with the forehead and underparts white and the underwing white with a broad dark margin, rather like the underwing of a Sooty Shearwater only paler, also darker markings on the side of the head and possibly the breast. The second bird was much the same, perhaps about 12 ins. long.

Bulwer's Petrel (*Bulweria bulwerii*). In the Atlantic near Madeira up to four were seen daily from H.M.S. Owen between 29°40'N. 15°15'W. and 37°10'N. 12°00'W. during 23rd-26th May, 1962 (R.O.M.), and D.S. also saw up to four birds daily between 38°34'N. 11°19'W. and 28°47'N. 15°13'W. during 3rd-5th June, 1962, with twenty at 32°57'N. 13°46'W. on 18th June, 1962, three at 31°36'N. 14°15'W. on 3rd August, 1961,

Twenty-four

two at 27°21'N. 15°29'W. on 31st August, 1962, one at 30°16'N. 14°34'W. on 14th September, 1962, and seven at 32°56'N. 13°30'W. on 28th September, 1962. When sailing north across the Pacific B.F.K. saw the first doubtful birds at 07°20'N. 169°50'W. and 16°35'N. 162°26'W. on 23rd and 25th May, 1960, and a definite one which flew right beneath the bow at 20°23'N. 158°52'W. on 26th May, 1960. He describes it as a small, blackish-brown petrel with lighter upper wing coverts, a wedge-shaped tail and a slow flight, more like that of a (gadfly?) petrel than the more rapid flight of a storm-petrel. In the less well-known wintering areas in the tropical Pacific T.F.S.F. saw three possible birds in the wake at 00°58'S. 105°49'E. on 22nd September, 1961, which he describes as uniformly dark sooty brown with paler coverts on narrow wings, like large swifts; and A.S. saw others at 09°34'S. 134°51'W. on 10th December, 1961, and again all the next day at 11°07'S. 141°11'W., which he describes as small, little larger than a storm-petrel, uniformly brown with long wings and a slender tail, and a flapping, gliding flight. In the Atlantic this species seems to be confused most often with the Sooty Shearwater, which is larger, greyer and much more heavily built; in the Pacific it is also likely to be confused with small dark storm-petrels as well as large dark shearwaters, but these accounts are probably acceptable, although with such records it is desirable that an attempt should be made to see the shape of the tail, which is forked with the storm-petrels, wedge-shaped in Bulwer's Petrel.

Jouanin's Petrel (*Bulweria fallax*). Further records have been received at intervals from the accepted range along the south coast of Arabia; T.N.G. noted a few in the Gulf of Aden but most off Ras Fartak in July-August, 1962.

Various other records of dark petrels were received as well as those which could be allocated to particular species. Thus N.G.C. reported five thousand or more dark petrels on the water and flying around in the Arabian Sea off Ras Madraka at 19°19'N. 58°12'E. on the morning of 9th September, 1961; and T.N.G. saw over a hundred nearby at 18°07'N. 57°24'E. south of Ras al Hadd on 29th July, 1962, five of which were identified as Wedge-tailed Shearwaters, three as Fleshy-footed Shearwaters, and one as a Jouanin's Petrel. A.S. also saw a number of large, dark petrels with pale faces and wing-tips and pale bills with dark tips for the first four days sailing N.E. from New Zealand in February-March, 1962, which he thought might include the White-Chinned, Great-winged and Kermadec Petrels among other species.

STORM PETRELS (*HYDROBATIDAE*)

Dark, white-rumped storm-petrels were as usual reported as a number of different species from a very wide area with varying degrees of credibility, sometimes as different things by observers passing through the same area within a few days of each other. As usual, most are likely to have been Wilson's Petrels, because these seem most prone to follow ships. The most interesting records come from the tropical Pacific, where A.S. saw birds with a white rump and a forceful flight which he thought

might be Madeiran Petrels first at 05°14'N. 85°10'W. on 2nd December, 1961; more numerous at 02°07'N. 97°17'W. two days later, with occasional ones at 00°03'N. 103°54'W. on 7th December, 1961, and 11°07'S. 141°11'W. and 12°06'S. 147°50'W. on 11th-12th December, 1961. At 09°34'S. 134°51'W. on 10th December, 1961, he saw another bird with a less forceful flight which flapped all the time. J.G.W. also saw white-rumped storm-petrels in the same area at 05°15'N. 85°24'W. and 04°31'S. 115°44'W. on 22nd and 28th September, 1962; and between 05°03'S. 93°33'W. and 05°11'N. 82°05'W. on 20th-23rd November, 1962. B.F.K. also saw birds at 07°N. 170'W. and 28°20'N. 140°45'W. on 23rd and 29th May, 1960. A number of species might occur in this region Leach's Petrel, the Madeiran Petrel, the Galapagos Petrel, Elliot's or Wilson's Petrels; and more information is required on how they can all be told apart.

Wilson's Storm-petrel (*Oceanites oceanicus*). Many birds were identified as this species, and others seem likely to have been so because it appears to be the one which most often follows ships. In the South Atlantic birds were seen from H.M.S. Owen at 37°00'S. 54°31'W. and 34°35'S. 47°04'W. on 16th and 27th April, 1961 (R.O.M.), and D.S. started to see the first birds off West Africa at this time, between 25°02'N. 16°08'W. and 06°44'N. 11°41'W. during 16th-24th April, 1962, with many around 12°N. 17°W. on 18th-19th April; W.E.W. also noticed white-rumped storm-petrels in the wake in much the same area on 15th-16th April, 1962, and they remained common there until October, D.S. reporting the last at 15°15'N. 17°35'W. on 22nd November, 1962. Further north, P.P.O.H. reported the first, six or more in the wake, at 36°11'N. 06°51'W. on 2nd May, 1962, and C.C.A. saw sixteen at 36°42'N. 12°45'W. on 11th May, 1962. There are numerous records from these latitudes later in the year, among the last being several seen by W.A.K. at 46°55'N. 20°09'W. on 17th October, 1961, while twenty were seen on southward passage from H.M.S. Owen at 05°30'S. 33°30'W. on 27th November, 1960. In the Indian Ocean there are also many records from the Arabian Sea during the northern summer, including one of hundreds feeding with phalaropes over shoals of fish, sharks and cuttlefish off Ras Madraka by W.L.N.F. on 6th October, 1961; C.C.A. also had one on board off Cochin on 26th September, 1962, and T.F.S.F. reported two white-rumped storm-petrels, presumably this species, at 00°43'S. 106°32'E. on 17th April, 1962. In the Pacific W.A.K. saw two at 07°00'N. 78°32'W. sailing south from Balboa on 19th July, 1962, and found them numerous at 28°10'S. 71°30'W. between Antofagasta and Valparaiso on 7th August, 1962; B.F.K. also saw five 40 miles south of Evans Head, New South Wales on 1st May, 1960.

White-faced Storm-petrel (*Pelagodroma marina*). D.S. reports six near the Canaries at 28°47'N. 15°13'W. on 5th June, 1962.

Grey-backed Storm-petrel (*Garrodia nereis*). A.S. reports he saw them mainly off East Island but occasionally all along the east coast of New Zealand in January 1962. They were dark above, with the wings and tail darker and the rump only a little lighter, and the underparts white except for the wing edges. They had a fluttering flight like Wilson's Petrel, and the feet extended beyond the tail as with that species.

British Storm-petrel (*Hydrobates pelagicus*). A number were reported as coming on board. D.S. had one on board at 12°N. 17°W. off West Africa on 15th May, 1962, right in the middle of the breeding season,

presumably a first year bird. N.G.C. had one on board at Benghasi on 30th September, 1961, and P.P.O.H. birds on board at 44°56'N. 08°05'E. on 9th November, 1961; 50°07'N. 05°03'E. on 16th November, 1961, (two); and 47°51'N. 05°44'W. and 48°07'N. 05°31'W. on 1st and 2nd December, 1961; he reports that in the last two cases the water temperature was 54°F., and the birds overall length 5ins. and overall wingspan 12½ins. D.S. saw thirty flying east singly at 23°52'N. 16°50'W. on 6th June, 1962, and one at 11°33'N. 17°25'W. on 10th December, 1962, and reports that he was able to see the distinctive white mark on the underwing at sea.

Macdoran Storm-petrel (*Oceanodroma castro*). This species was reported on a number of occasions from different parts of the eastern tropical Atlantic and Pacific, but details to substantiate the identification were supplied with few of these records. D.S. reported five birds in the wake with Wilson's Petrels off West Africa at 28°47'N. 15°13'W. on 5th June, 1962, which appeared slightly larger with a less fluttering flight, veering from side to side. On the other hand, Captain Mörzer Bruyns reports that this species usually flies straighter than the other storm-petrels.

Leach's Storm-petrel (*Oceanodroma leucorhoa*). In the Atlantic, D.S. reports two at 32°56'N. 13°30'W. on 28th April, 1962; one was seen from H.M.S. Owen at 06°00'S. 14°00'W. on 9th May, 1961 (R.O.M.); K.D.A.L. had one on board at 41°04'N. 57°07'W. on 4th May, 1962; S.C. reports one at 52°02'N. 13°18'W. on 21st June, 1961, in addition to the usual records further west at this season; D.S. had one on board at 24°55'N. 16°30'W. on 3rd November, 1961; W.N.H.J. had one on board at 9°N. 30°W. on 6th November, 1961; P.P.O.H. reports one on board at 36°27'N. 07°32'W. on 30th November, 1961; and D.S. saw up to twelve at 16°45'N. 17°42'W., 16°06'N. 17°33'W. and 20°22'N. 17°30'W. on 9th, 16th and 17th December, 1962. T.N.G. reports five in a gale, one of which came on board, at 54°20'N. 07°05'E. in the North Sea on 2nd November, 1961. A.S. reports that in the eastern tropical Pacific he saw a storm-petrel with a divided rump (this is much more conspicuous in some Pacific populations than those from the Atlantic) at 03°43'N. 91°13'W. on 3rd December, 1961, and other birds with divided rumps intermittently throughout 12th March, 1962, at 05°63'S. 97°24'W. and again at 04°22'S. 92°47'W. and 00°46'S. 88°08'W. on the next two days.

Matsudeira's Storm-petrel (*Oceanodroma matsudeirae*). B.F.K. saw eight large storm-petrels between Okinawa and Tokyo at 31°59'N. 136°02'E. on 28th March, 1960, another in the distance at 22°50'N. 138°00'E. on 4th April, 1960, fifty in the distance at 24°02'N. 139°45'E. off the Volcano Is. on 19th April, 1960, and two more four miles west of Apra Harbour, Guam, on 24th April, 1960, which must have been either this species or Tristram's Storm-petrel (*O. tristrami*). The first ones are described as "all blackish brown, with lighter brown upper wing coverts, long wings, and long, deeply forked tails. They all had a small white patch just beyond the bend of the wing. They looked very much like the Black Storm-petrel (*O. melania*) which I have seen off California. However, the Black Storm-petrels do not have the mark on the wing. These birds seemed too large for dark-rumped Leach's Petrels, and flew differently from Leach's Petrel. They followed the ship for an hour." The last two birds were also seen well, and appeared too large for Leach's Petrel, with

a white spot just beyond the bend of the wing; B.F.K. notes that they appear to be a new record for Micronesia, since no storm-petrels have been reported there before. From the account it appears that these birds must almost certainly have been Matsuideira's Storm-petrel, which is relatively brown with white primary shafts, which could appear as a white patch on the wing in life; Tristram's Storm-petrel is bluer in colour, with more marked white wing coverts and a pale bar across the rump, but no pale primary shafts. This white mark on the wing may be the first useful field mark reported for Matsuideira's Petrel; I have seen no previous description of its appearance at sea, though Captain Mörzer Bruyns tells me that it is the only other storm petrel besides Wilson's Petrel which he has known to follow ships.

Least Storm-petrel (*Halocyptena microsoma*). W.A.K. had one on board 6½ miles off Cape Mala, Panama, on 2nd February, 1962. It appeared to have moulted and replaced all but the outer two or three primaries by this date. It was 131mm. long to the tip of the tail, and 150mm. to the tip of the folded wings, and the wingspan was 295mm.

DIVING PETRELS (*PELECANOIDIDAE*)

Georgian Diving-petrels (*Pelecanoides georgicus*) were seen from N.M.S. Owen at 51°00'S. 30°45'W. on 2nd February, 1961; 53°18'S. 52°10'W. on 9th April, 1961; and 47°05'S. 61°25'W. on 13th April, 1961, (R.O.M.). B.F.K. saw three Common Diving-petrels (*Pelecanoides urinatrix*) in the Bass Strait eighty miles east of Wilson's Promontory on 3rd May, 1960.

TROPIC BIRDS (*PHAETHONTIDAE*)

Red-billed Tropic-bird (*Phaethon aethereus*). N.G.C. had one on board at 13°50'N. 68°10'W. on 16th May, 1962, and W.A.K. another at 02°30'N. 78°40'W. on 30th August, 1962.

Red-tailed Tropic-bird (*Phaethon rubricauda*). B.F.K. saw one at 23°17'N. 130°56'E. near the Volcano Is. on 19th April, 1960, three at 20°10'N. 159°05'W. on 26th May, 1960, and one at 28°20'N. 140°45'W. on 29th May, 1960. J.G.W. saw one at 17°49'S. 172°52'W. and six at 25°13'S. 176°56'E. on 11th and 23rd October, 1962.

White-tailed Tropic-bird (*Phaethon lepturus*). R.O.M. had one on board at 04°12'N. 71°20'E. in the Indian Ocean on 4th February, 1962. In the Pacific J.B.M. saw two at 04°37'N. 126°51'E. on 27th March, 1962 while another tropic-bird seen feeding with boobies and frigate-birds on a shoal of fish at 02°46'S. 142°21'E. on 24th March, 1962 seems most likely to have been this species; B.F.K. saw one at 21°32'N. 156°55'W. on 27th May, 1960, a dozen flying round the mouth of Apra Harbour, Guam on 24th April, 1960, and one at 19°42'S. 171°35'E. on 19th May, 1960; and J.G.W. saw two at 17°37'S. 169° 15'W. on 10th October, 1962, two at 20°34'S. 119°04'W. on 14th November, 1962; and one at 10°15'S. 101°53'W. on 18th November, 1962.

PELICANS (*PELECANIDAE*)

There are the usual records of large flocks of Brown Pelicans (*Pelecanus occidentalis*) offshore along both coasts of tropical America; as for example over a hundred at Amay Bay, Venezuela on 14th Nov-

Twenty-eight

ember, 1961 (T.N.G.) and at Balboa on 18th May, 1962 (W.N.H.J.). B.F.K. saw twenty Australian Pelicans (*P. conspicillatus*) at Phillip Id. near Melbourne on 6th May, 1960, and comments on the interesting black and white pattern of the wing and tail. D.S. produced the most notable record, an Eastern White Pelican (*P. onocrotalus*) off West Africa at 19°54'N. 17°42'W. on 25th April, 1962. A breeding colony of the last species has recently been discovered in this area by de Naurois and others.

GANNETS AND BOOBIES (*SULIDAE*)

Northern Gannet (*Moris bassanus*). D.S. saw many, including both adults and young, off West Africa south to 14°36'N. 17°34'W. until mid April, 1962, and again south to 15°15'N. 17°35'W. from late November onwards, with one, described simply as adult, at 13°35'N. 17°29'W. on 8th June, 1962. It seems curiously late to find it so far south in the winter quarters, but apparently the white boobies have so far only been recorded in this region far offshore at Ascension.

Cape Gannet (*Moris (bassanus) capensis*). C.C.A. saw immatures off Lobito Bay on 23rd May, 1962, and W.E.W. other particoloured gannets which must be this species on the other side of Africa off Lourenço Marques at 25°55'S. 33°00'E. on 5th May, 1962. He reports a dense flock were seen with radar 2½ miles away in the vicinity of three whales and what were probably seals off Bird Island, Algoa Bay, South Africa, on 29th May, 1962.

Australian Gannet (*Moris (bassanus) serrator*). B.F.K. found them common off Port Phillip Bay, Australia in May, 1960, and comments that they look just like Northern Gannets; A.S. found them plentiful off Auckland, New Zealand, in January, 1962.

Blue-footed Booby (*Sula nebouxii*). A.S. saw several possible birds between 03°43'N. 91°13'W. and 02°07'N. 97°17'W. on 3rd-4th December, 1961.

Blue-faced Booby (*Sula dactylatra*). In the Caribbean area T.N.G. saw birds at 19°19'N. 62°41'W. and 12°54'N. 69°47'W. on 12th and 15th November, 1961, and J.G.W. reported fifty at 17°53'N. 68°26'W. on 28th November, 1962. In the South Atlantic R.O.M. reports that the first was seen from H.M.S. Owen at 11°32'S. on 12th May, 1962, twenty off Ascension next day, and the last at 06°00'S. 14°00'W. on the day after. In the Indian Ocean W.N.H.J. saw hundreds, about 30 per cent. immature, in an uncountable carpet on the water off the Kuria Muria Is., south Arabia, on 26th September, 1962. In the East Indies J.B.M. reports a flock in the Basila Strait (about 05°N. 125°E.?) on 28th March, 1962, while in the Pacific W.H.N.J. saw two at 05°48'N. 79°28'W. on 12th May, 1962, A.S. saw possible birds at 00°46'S. 88°08'W. and 03°50'N. 83°37'W. on 14th and 15th March, 1962. I.G.W. (who does not report any Red-footed Boobies, so there may be some confusion of species here) recorded forty with Brown Boobies at 02°13'N. 94°33'W. on 24th September, 1962, two at 18°07'S. 179°47'W. on 13th October, 1962, one off Suva on 30th October, 1962, and 55 at 05°03'S. 93°33'W., five at 02°05'S. 89°36'W. and one at 01°42'N. 86°00'W. on 20th, 21st and 22nd November, 1962. B.F.K. (who does also report Red-footed Boobies) saw two at 21°18'N. 159°20'W. on 16th January, 1960, one at 22°12'S. 153°49'E. on 30th April, 1960, and again at 28°40'S. 158°20'E. and 07°45'N. 169°36'W. on 17th and 23rd May, 1960.

Red-footed Booby (*Sula sula*). In the Pacific B.F.K. reports two, 300, and again two white-phased birds four to nine miles south of Pearl Harbour, Hawaii, on 11th, 13th and 16th January, 1960, a light brown bird with a white lower belly and light tail at 22°12'S. 153°49'E. on 30th April, 1960, and six white-phase birds at 19°43'S. 171°35'E. on 19th May, 1960. A.S. also reports a possible bird at 14°05'S. 161°12'W. on 14th December, 1961, several at 15°12'S. 167°37'W. next day, and one at 16°16'S. 174°27'W. on 17th December, 1961.

Brown Booby (*Sula leucogaster*). In the Caribbean area J.G.W. saw 200 at 17°53'N. 68°26'W. in the Mona Passage on 28th November, 1962, A.S. saw over thirty at 08°00'N. 74°42'W. on 1st December, 1961, and T.N.G. saw two at 12°54'N. 69°47'W. on 15th November, 1961. From H.M.S. Owen R.O.M. reports twenty at 10°00'N. 54°45'W. on 16th November, 1960, one at 20°50'S. 32°00'W. on 5th December, 1960, and fifteen off Rio de Janeiro on 12th December, 1960 and again off Ascension on 8th May, 1961. In the Indian Ocean in addition to the usual records from the Red Sea area J.S.L. reports two at 06°30'N. 79°E. on 16th November, 1960. Around the East Indies and in the Pacific E.J.D. reports single birds at 18°23'S. 156°28'E. and 07°21'S. 156°19'E. on 8th and 10th December, 1961, two at 08°00'N. 150°55'E. on 13th December, 1961, and about twenty at 02°00'S. 128°03'E. on 21st January, 1962; L.F.H. reports twenty in the Malacca Strait at 05°37'N. 99°26'E. and more passing the huge colony serving these waters at Pulau Perak off Penang on 26th November, 1962. J.B.M. reports hundreds with frigate-birds and a tropic-bird over fish shoals at 02°46'S. 142°21'E. and 00°42'S. 136°58'E. on 14th and 25th March, 1962, B.F.K. reports birds six miles south of Pearl Harbour, Hawaii on 13th January, 1960, at 03°24'S. 153°03'E., 10°49'S. 154°30'E. and 22°12'S. 153°49'E. on 27th, 28th and 30th April, 1960, and at 19°42'S. 171°35'E. on 19th May, 1960. A.S. reports one at 05°14'N. 85°10'W. on 2nd December, 1961 and eight at 08°08'N. 79°40'W. on 16th March, 1963; J.G.W. reports two at 05°15'N. 85°24'W. on 22nd September, 1962 and 100 at 02°13'N. 94°33'W. two days later, two at 17°19'S. 152°08'W. on 7th October, 1962 and twelve off C. Mala, Panama, on 24th November, 1962; and W.N.H.J. reports six off Balboa on 18th May, 1962.

CORMORANTS AND SHAGS (*PHALACROCORACIDAE*)

As usual, we only have casual records of these mainly coastal birds. B.F.K. reports the Common and Pelagic Cormorants (*Phalacrocorax carbo* and *P. pelagicus*) commonly in Tokyo Bay, coastal Honshu, the inland sea of Japan and Chinhae, S. Korea, in January, April, 1960, commenting that while he got close enough to Common Cormorants to see that the throat feathers did not go all the way up the lower mandible, he never managed to see any Japanese Cormorants (*P. capillatus*) which occur in the same region and look very similar but have more feathering on the chin. He met Common Cormorants again in Port Philip Bay, Australia, on 4th-9th May, 1960, together with Little Black Cormorants (*P. sulcirostris*), recognisable by their smaller size, Pied Cormorants (*P. varius*), Little Pied Cormorants (*Halietor melanoleucus*) and possible White-breasted Cormorants (*P. fuscescens*), though he did not get close enough to be sure of the face-markings of the last. C.C.A. also reported three Common Cormorants in Dakar Bay, west Africa, on 15th

May, 1962, and R.O.M. six King Cormorants (*P.albiventer*) at 51°30'S. 57°45'W. on 12th April, 1961.

FRIGATE-BIRDS (*FREGATIDAE*)

Ascension Frigate-bird (*Fregata aquila*). Eight were seen from H.M.S. Owen several miles off the east coast of Ascension on 8th May, 1961 (R.O.M.).

Christmas Frigate-bird (*Fregata andrewsi*). This species is well-known to occur on Christmas Island in the Indian Ocean, but its precise range and status in the East Indies to the north, and its relation to the Great Frigate-bird there, are still obscure. T.F.S.F. (who also saw both Great and Lesser Frigate-birds in the region) reports two males at 01°37'S. 105°16'E. on 8th February, 1962, possible female and immature birds at 00°05'S. 108°00'E. on 3rd April, 1962, and seven positive males at 01°33'S. 105°22'E. next day. The positively identified males were all black or nearly black birds with white bellies seen circling high overhead and in the first case swooping low, within twelve miles of Toty Id.; the two uncertain birds were dark sooty brown, nearly black, with white belly and breast, and in the case of the immature with a brownish head and buff stripe on the wing.

Magnificent Frigate-bird (*Fregata magnificens*). Many recorded in the Caribbean and along both coasts of central America, as usual. N.G.C. saw the first at 30°11'N. 45°59'W. on 12th May, 1962, and several in the Sombrero Passage at 18°37'N. 63°27'W. three days later; T.N.G. saw twelve at 19°19'N. 62°41'W., fifty at 14°55'N. 67°31'W., and others off Amay Bay, Venezuela, at 12°54'N. 69°47'W. and 17°03'N. 65°09'W. on 12th-16th November, 1961; W.A.K. saw many along the Venezuela coast in September, 1961 and more south down the west coast of South America to Rio Guayas in July, 1962; W.N.H.J. saw eight in Balboa on 18th May, 1962; and A.S. saw them at 16°25'N. 65°07'W. on 27th November, 1961, at Curacao next day, and in numbers at 08°08'N. 79°40'W. on 16th March, 1962. The species appears to be rare on the east side of the Atlantic, where it has only been recorded breeding on Boavista in the Cape Verde Is. and at sea off the Gambia (it seems most likely that these last birds breed near the colony of Brown Boobies in the Bissagos Is. off Portuguese Guinea), but if two birds which looked rather like frigate-birds seen flying along the coast at Lobito Bay, S.W. Africa by C.C.A. on 23rd May, 1962 really did belong to this group it seems possible this species may occur further south along the west coast of Africa as well. The absence of records from the Gulf of Guinea in particular seems surprising.

Great Frigate-bird (*Fregata minor*). In the Indian Ocean E.G.M. saw six at 09°46'S. 57°30'E. on 13th March, 1962, and J.B.M. seven in the Malacca Strait on 2nd April, 1962. Beyond the Malacca Strait T.F.S.F. recorded a female at 03°16'S. 106°26'E. on 10th August, 1961, describing it as all dark, nearly black, with the nape and wing bar paler and the breast and sides white; and two similar birds with an immature at 01°26'S. 105°25'E. on 14th November, 1960, near where he later recorded Christmas Frigate-birds. In the Pacific B.F.K. recorded a male at 22°04'N. 163°58'W. on 17th January, 1960, two more at 19°52'N. 159°33'W. on 26th May, 1960, and one at 21°33'N. 156°55'W. next day, while A.S. reported a female with a whitish throat at 05°14'N. 85°10'W.

on 2nd December, 1961. In the South Atlantic R.O.M. reports that about twenty Greater and Lesser Frigate-birds were seen from H.M.S. Owen when leaving Rio de Janeiro on 12th December, 1960 without giving a description; which is perhaps possible since they are known to breed on South Trinidad far out to sea in this region, though the birds occurring along the shore are reported to be Magnificent Frigate-birds.

Lesser Frigate-bird (*Fregata ariel*). Around the East Indies T.F.S.F. reported single birds at 05°53'S. 108°17'E. on 11th August, 1961, 04°08'S. 106°58'E. on 27th December, 1961 and 00°54'S. 105°51'E. on 4th September, 1961. He saw six at 01°25'S. 105°52'E. on 28th April, 1962, three at 00°58'S. 106°07'E. on 3rd May, 1962, twenty at 01°44'S. 106°12'E. on 7th May, 1962, and four at 01°28'S. 105°53'E. on 25th May, 1962. In the south Pacific B.F.K. reports two at 19°42'S. 171°35'E. on 19th May, 1960; the birds reported with Great Frigate-birds off Rio de Janeiro by H.M.S. Owen are discussed under that species.

Unidentified Frigate-birds (*Fregata* sp.). Identification of frigate-birds is always difficult, and the residue of records where the precise identity is not even suggested includes birds seen by J.B.M. with boobies over a shoal of fish at 02°46'S. 142°21'E. on 24th March, 1962, and again in the Basilan Strait at about 5°N. 125°E. on 28th March, 1962; and others seen by J.G.W. with boobies at 02°13'N. 94°33'W. on 24th September, 1962, at 09°40'S. 131°11'W. on 1st October, 1962, and at 01°42'N. 86°00' W. on 22nd November, 1962.

PHALAROPES (*PHALAROPOPIDAE*)

The identification of these birds in winter plumage at sea is difficult, and it is not clear to what extent such identifications can be relied upon. Therefore careful descriptions of birds which come on board are particularly valuable here. Sight records will therefore be discussed collectively, with details of reliable identifications of species.

In the Atlantic, D.S. saw the first ten birds off West Africa at 16°18'N. 17°37'W. on 6th August, 1961, with a hundred on southward passage off Cape Finistere on 27th August, and four more at 37°14'N. 11°52'W. two days later. He saw five at 12°43'N. 17°29'W. on 3rd September, 1962, six at 11°02'N. 17°24'W. on 8th September, 1962, twenty at 19°52'N. 17°37'W. two days later, and two and six at 34°21'N. 13°12'W. and 38°36'N. 11°29'W. on 15th-16th September, 1962. Three were also seen from H.M.S. Owen at 35°40'N. 14°20'W. on 3rd October, 1960 (R.O.M.) In November and December D.S. saw one or two on four occasions between 29°46'N. 14°22'W. and 21°47'N. 17°10'W., while J.H.A. has produced the skin of a Grey Phalarope (*Phalaropus fulicarius*) which died off Tenerife on 24th January, 1961; T.N.G. also reports a Red-necked Phalarope (*Lobipes lobatus*) came aboard in the Straits of Gibraltar on 2nd January, 1961, but the bird-in-hand form has not come to hand yet, and it seems worth emphasising that definite evidence that Red-necked Phalaropes winter in the east Atlantic area is not yet available) E.G.M. saw seventeen phalaropes at 14°05'N. 17°45'W. on 20th February, 1962, and D.S. hundreds of probable Grey Phalaropes at 25°02'N. 16°08'W. on 16th April, 1962.

In the east Pacific A.S. had a Grey Phalarope on board west of the Galapagos at 01°50'N. 100°W., and saw one possible and four definite phalaropes in much the same area at 05°63'S. 97°24'W. and 00°46'S.

88°08'W. on 12th and 14th March, 1962. In the west Pacific, J.B.M. saw hundreds of flocks of phalaropes in the Basila Strait, in the East Indies at about 5°N. 125°E., on 28th March, 1962, and B.F.K. saw over a hundred birds on northward migration at 32°40'N. 136°40'E. on 28th March, 1960, and eight more at 33°50'N. 138°00'E. on 4th April, 1960. Those seen closely had pale, plain grey backs and thick, stubby bills which suggests they were Grey Phalaropes. In the Indian Ocean T.N.G. saw many around the south coast of Arabia as early as 5th-11th August, 1962, although they did not appear to have reached the Gulf of Aden as early as this, while C.C.A. saw many flocks at 12°24'N. 48°30'E. in the Gulf of Aden on 19th November, 1962. J.H.A. has also sent in the skin of a Red-necked Phalarope that died at 22°56'N. 59°35'E., 70 miles east of Muscat, on 8th April, 1961; confirmation of the presence of Grey Phalaropes is still lacking for this area, however.

SKUAS OR JAEGERES (*STERCORARIIDAE*)

Great Skua (*Catharacta skua*). In the North Atlantic D.S. reports one unusually far south at 21°47'N. 17°10'W. on 8th December, 1962. In the south, birds were seen from H.M.S. Owen south from 39°20'S. 05°30'W. in 5th February, 1961, with two twenty miles off the mouth of the River Plate on 19th April, 1961 (R.O.M.). W.A.K. also saw one in this region at 28°10'S. 71°30'W. on 7th August, 1962, while W.E.W. saw birds off South Africa at 34°10'S. 25°40'E. and 28°45'S. 13°41'E. on 29th May and 1st June, 1962. B.F.K. saw birds off Wilson's Promontory, Port Phillip Bay, and Green Cape, East Australia, on 3rd-9th May, 1960, while finally (the most important records), in the Indian Ocean L.F.H. saw two birds in the Minicoi Channel off the Maldives on 7th December, 1962, and N.G.C. one at 24°50'N. 60°49'E. in the Gulf of Oman on 12th August, 1962. These last birds are described as being brown or dark brown with lighter or yellowish napes.

Pomarine Skua (*Stercorarius pomarinus*). In the eastern Atlantic area among other records D.S. reports many off West Africa at 15°37'N. 17°37'W. on 24th April, 1962, and some at 19°54'N. 17°42'W. next day, C.C.A. saw two in Dakar Bay on 15th May, 1952, and D.S. reports eight including both adults and immatures still present at 18°38'N. 17°35'W. on 7th June, 1962, four at 09°15'N. 15°23'W. two days later, and two on the return trip at 20°22'N. 17°24'W. on 15th June, 1962; also thirty on passage off Cape Finistere on 17th September, 1962. In the Caribbean area T.N.G. saw birds at 19°19'N. 62°41'W., 14°55'N. 67°51'W. and 17°03'N. 65°09'W. on 12th, 13th and 16th November, 1961, and A.S. numbers at 16°25'N. 65°07'W. and 08°00'N. 74°42'W. on 27th November and 1st December, 1961. In the Pacific, B.F.K. saw fifty 10-50 miles off Oahu, Hawaii on 13th January, 1960, while T.F.S.F. reports a probable bird in the wake off Sumatra at 00°46'S. 106°39'E. on 11th April, 1962. B.F.K. provides a detailed description of one seen off Port Phillip Bay, Australia, on 3rd-4th May, 1960.

Arctic Skua (*Stercorarius parasiticus*). In the Atlantic, among other records D.S. reports one on migration at 42°00'N. 10°00'W. on 28th August, 1962 and C.C.A. another possible one at 20°28'N. 18°06'W. on 14th May, 1962. In the Pacific, B.F.K. saw one between the Izu peninsula and the Oshima Is., Japan on 29th January, 1960, and he also reports one about 80 miles east of Wilson's Promontory in the Bass Strait and six off Port Phillip Bay, Australia, on 3rd-4th May, 1960.

Long-tailed Skua (*Stercorarius longicaudus*). In the Atlantic, S.C. reports one at 59°05'N. 46°58'W. on 9th August, 1961, and two at 56°50'N. 29°30'W. on 5th August, 1962, with more at 58°28'N. 38°W. next day. D.S. saw one off Cape Finistere on 17th September, 1962, and K.D.A.L. five at 44°05'N. 46°02'W. on 4th October, 1962. In spring B.K.L. saw two at 40°N. 68°W. on 14th April, 1962, and two more at 40°N. 58°W. next day, while S.C. saw several at 47°41'N. 43°15'W. on 4th May, 1962. In the Pacific B.F.K. has also supplied a description of a bird seen at 33°50'N. 138°00'E. on 4th April, 1960, which appeared smaller and more lightly built than two larger skuas seen in the distance at the same time, with a clear white breast a lighter back, and a more buoyant tern-like flight. The two central tail-feathers did not extend further beyond the tail than in other skuas, however.

B.F.K. also saw small skuas in the distance in the central Pacific at 07°20'N. 169°50'W. and 19°52'N. 159°33'W. on 23rd and 26th May, 1960.

GULLS (*LARIDAE*)

We receive a vast number of records of these, mainly from coasts and harbours where they are well-known, so that it would be unprofitable to cite the observations in detail. B.F.K. saw most; he reports Japanese Gulls (*Larus crassirostris*), Mew Gulls (*Leucis*), Herring Gulls (*L. argentatus*), Slaty-backed Gulls (*L. schistisagus*), Glaucous-winged Gulls (*L. glaucescens*), and Black-headed Gulls (*L. ridibundus*) from Japan; and Pacific Gulls (*Gabianus pacificus*), Southern Black-backed Gulls (*L. dominicanus*) and Silver Gulls (*L. novaehollandiae*) from Australia. W.A.K. reported Grey Gulls (*L. modestus*) and Southern Black-backs numerous at Bahia Arica, Chile, on 4th August, 1962. D.S. saw a lesser Black-backed Gull (*L. fuscus*) as far south as Monrovia, Liberia on 13th December, 1962. R.O.M. saw eight Southern Black-backs and six Patagonian Black-heads (*L. maculipennis*) in the Plate Estuary on 19th April, 1961. T.N.G. and W.A.K. both saw Laughing Gulls (*L. atricilla*) off Venezuela in September and November, 1961. C.C.A. saw ten Grey-headed Gulls (*L. cirrocephalus*) at Lobito Bay, S.W. Africa, on 23rd May, 1962. N.G.C. saw two Mediterranean Gulls (*L. melanocephalus*) in the Bay of Tunis on 29th July, 1961. S.C. saw a Northern Black-headed Gull (*L. ridibundus*) in summer plumage in the Atlantic at 50°25'N. 29°42'W. on 2nd May, 1962, and up to fifty Bonapart's Gulls (*L. philadelphia*) at Churchill on the Hudson's Bay during 16th-19th August, 1962, and J.G.W. saw a Swallow-tailed Gull (*Creagrus furcatus*) at 02°05'S. 89°36'W. on 21st November, 1962.

The most important records cover the two most pelagic species, Common Kittiwakes (*Rissa tridactyla*) and Sabine's Gull. Among many other records, in the Atlantic S.C. saw many Kittiwakes, mostly immature, with Fulmars at 58°12'N. 43°08'W. on 21st September, 1961; six were seen twenty miles east of S. Miguel in the Azores from H.M.S. Owen on 26th October, 1960 (R.O.M.); and D.S. saw birds south to 25°07'N. 16°00'W. off West Africa on 20th November, 1962. In December 1962 R.W. noticed that, like Fulmars, Kittiwakes cease to follow a ship at night even with a full moon. At 49°50'N. 39°31'W. on 21st December, 1961, they left the ship's wake in groups about an hour after sunset, between 1630 and 1640 hours, gliding low over the water like shearwaters,

and then settling. In the Pacific B.F.K. saw Kittiwakes in Tokyo Bay and the Inland Sea of Japan in January-March 1960, and over 5,000 at 40°00'N. 143°54'E. about 110 miles east of Fudai, N. Honshu. on 22nd February, 1960.

It has been known for a long time that Sabine's Gull (*Xema sabini*) breeds on pools of the Arctic tundra and winters at sea off Peru, also occurring along the west coast of Europe on autumn passage. It has only recently been discovered that it also migrates south through the Atlantic to winter off South Africa as well (N. Mayaud, *Alauda* 29:165-174). In 1962 D.S. saw them on both passages. Two were seen at 14°36'N. 17°34'W. on 18th April, six at 09°45'N. 16°01'W. next day, others at 07°43'N. 13°53'W., 11°01'N. 17°20'W. and 19°54'N. 17°42'W. on 22nd, 23rd and 25th April, and 21 at 42°00'N. 10°00'W. on 28th August, with five off Cape Finistere on 17th September. J.G.W. also saw one in the Pacific at 01°42'N. 86°00'W. on 22nd November, 1962.

TERNs (STERNIDAE).

These, like the cormorants and gulls are mainly coastal species best studied from the shore, and while we have casual notes of a great many species encountered in harbours, in this case also there is little important information adding to that already available to land-based ornithologists except in the case of the few species which occur far out at sea.

Whiskered Tern (*Chlidonias hybrida*). T.F.S.F. reports about thirty feeding from the sea surface over Pontiank Bar at 00°05'N. 109°05'E. on 3rd and 20th September, 1961.

White-winged Black Tern (*Chlidonias leucoptera*). T.F.S.F. reports that between 17th April and 19th May, 1962, they were seen at 00°43'S. 106°32'E., 00°53'S. 106°21'E., 02°01'S. 106°18'E., 01°25'S. 105°52'E., 00°58'S. 106°07'E., 01°44'S. 106°12'E., and 01°27'S. 105°48'E., all within 40 miles of the Bandar Coast, and mostly within ten miles, usually feeding from the water surface over shoals of fish but sometimes settled on the water away from them in parties of 40-60 birds. D.S. also reports one off West Africa at 19°54'N. 17°42'W. on 25th April, 1962, and possible birds with flocks of Black Terns near here on 17th and 20th April, without details; it is still not clear to what extent this species occurs with the undoubtedly commoner Black Terns on this coast.

Black Tern (*Chlidonias nigra*). P.P.O.H. saw two flocks of about six at 36°11'N. 06°51'W. in the approaches to Gibraltar on 1st May, 1962. Further south, off West Africa, D.S. saw thousands, possibly mixed with White-winged Black Terns, at 19°57'N. 17°31'W. on 17th April, 1962, and others south to 07°43'N. 13°53'W. on 22nd April, 1962, and north again to three at 19°54'N. 17°42'W. on 25th April, 1962. A hundred were still present at 09°15'N. 15°23'W. on 9th June, 1962, with twenty at Monrovia next day and sixty at 11°25'N. 17°30'W. on 13th June, 1962; later records include a hundred already in immature or winter plumage at 17°34'N. 17°32'W. on 2nd September, 1962, and groups at 21°47'N. 17°10'W. on 8th December, 1962.

Gull-billed Tern (*Gelochelidon nilotica*). In the East Indies T.F.S.F. recorded over fifty in Cheribon Roads at 06°40'S. 108°36'E. on 28th December, 1961; over forty moulting into summer plumage scattered low over the water picking food from the surface at the Musi River mouth at

02°13'S. 104°57'E. from 9th March to 21st May, 1962; and fifty at 01°37'S. 105°16'E., 5 miles off Bairkan Id., on 8th February, 1962.

Caspian Tern (*Hydroprogne tschegra*). L.J.M. saw one flying north in the Mediterranean at 32°12'N. 29°47'E. on 17th April, 1962, and D.S. three at Monrovia on 9th August, 1961.

Common Tern (*Sterna hirundo*). D.S. saw numbers of white terns, probably largely this species, off West Africa on various occasions throughout the year, including small groups at 19°57'N. 17°31'W. on 17th April, 1961, occasional birds south from 18°38'N. 17°35'W. on 7th June, 1962, to Monrovia three days later; forty at 20°22'N. 17°24'W. on 15th June, 1962; some at 15°15'N. 17°35'W. on 22nd November, 1962; and groups at 21°47'N. 17°10'W. on 8th December, 1962. On the opposite side of the Atlantic T.N.G. saw forty off Amay Bay, Venezuela, on 14th November, 1961; while in the Pacific B.F.K. describes in detail four birds feeding in a tidal pool two miles north of Apra Harbour, Guam, on 24th April, 1960, which appear to be the first for the Marianas. They were in winter plumage, small-medium in size, white below with pale grey mantles, somewhat darker primaries, dusky caps, the outer tail feathers somewhat longer than the rest, and black bills.

Arctic Tern (*Sterna paradisaea*). B.F.K. saw one on spring passage in the North Pacific at 28°20'N. 140°45'W. between Hawaii and California on 29th May, 1960. It flew right over him at twenty feet, allowing him to see the white cheeks contrasting with the dark cap and slightly grey throat, and the completely blood-red bill. This species is quite common on migration in the central north Atlantic; its status in the Pacific seems obscure.

Brown-winged Tern (*Sterna anaethetus*). In the eastern Atlantic W.E.W. saw many at 10°42'N. 16°57'W., 46 miles from the Bissagos Is., on 9th June, 1962. In the Caribbean area J.G.W. had a probable immature bird on board at 18°15'N. 64°08'W. on 16th September, 1962; T.N.G. saw over a hundred off Amay Bay, Venezuela, on 15th November, 1961; and W.A.K. found them numerous at 16°58'N. 70°20'W. on 4th September, 1962. In the Indian Ocean J.H.A. collected a bird which died at 24°44'N. 58°02'E., 75 miles NNE of Muscat, on 8th April, 1961. In the East Indies T.F.S.F. saw four at 04°08'S. 106°58'E. on 27th December, 1961; two at 01°28'S. 105°53'E. on 25th May, 1962, and two at 00°58'S. 105°49'E. on 22nd September, 1961; and had a possible bird on board at 05°57'S. 108°18'E. on 29th December, 1961.

Sooty Tern (*Sterna fuscata*). There are a number of records of this most pelagic and social of tropical terns. In the Caribbean area W.A.K. saw eight at 19°40'N. 65°34'W. and numbers at 15°40'N. 75°00'W. on 4th and 27th September, 1961; N.G.C. saw flocks in the Sombrero passage at 18°37'N. 63°27'W., at 13°50'N. 68°10'W. and 15°33'N. 57°58'W. on 15th, 16th and 20th May, 1962; J.G.W. saw thirty at 16°20'N. 67°51'W. and 150 flying SE in parties at 14°27'N. 71°25'W. on 17th and 18th September, 1962; and they were seen off Trinidad from H.M.S. Owen on 15th November, 1960. They were also seen from H.M.S. Owen in the South Atlantic off Martin Vas on 4th December, 1960, at 11°32'S. 13°40'W. on 7th May, 1961; off Ascension next day; and terns of this type were seen at 05°45'N. 14°10'W. on 12th April, 1961 (R.O.M.), while W.N.H.J. had a young bird on board at 08°N. 22°30'W. on 5th November, 1961. In the Indian Ocean J.B.M. reports that terns of this type were seen in hundreds at 06°29'N. 78°20'E. on 6th April, 1962; another very large flock at 08°11'N. 67°43'E. two days later with hundreds at 09°40'N. 63°12'E. the

following day. The first two groups were feeding over shoals of fish; on the third occasion the birds were in sight in all directions for several hours, aimlessly circling and flying from group to group in a region about 500 miles from any land. Many more were seen again at 10°39'N. 57°56'E. on 10th April, 1962. In the Pacific J.G.W. reports 120 at 18°07'S. 179°47'W. and one at 10°15'S. 101°53'W. on 13th and 18th November, 1962, and B.F.K. hundreds of birds off Pearl Harbour on 27th May, 1960, thirty at 20°31'N. 157°27'W. on 13th January, 1960, and five at 20°23'N. 158°52'W. on 26th May, 1960 in this region, and seven at 29°06'S. 154°01'E. on 1st May, 1960. J.B.M. comments that the large numbers met in the Indian Ocean appeared mainly during the night and early morning, and wonders where they go for the rest of the day; this agrees with other reports. It seems clear that there is a need for a proper investigation of the natural history of this bird, to see where they go at other times; but possibly they just avoid ships by day at sea.

Fairy Tern (*Sterna nereis*). B.F.K. reports two from Port Phillip Bay, Australia, on 4th May, 1960, commenting that they look like Little Terns, but not so dark.

Damara Tern (*Sterna balaenarum*). C.C.A. reports about a dozen at Lobito Bay, S.W. Africa, on 23rd May, 1962.

Little Tern (*Sterna albifrons*). D.S. saw some at Monrovia, Liberia, on 20th May, 1962, and another on 13th December, 1962.

Crested Tern (*Thalasseus bergii*). B.F.K. found them common along the shore at Port Phillip Bay and Sydney, Australia, in May 1960, and A.S. saw them off Suva, Fiji, on 23rd December, 1961, commenting that they replace the gulls as scavengers there.

Royal Tern (*Thalasseus maximus*). D.S. saw twenty at Monrovia on 20th April, 1962, and three there on 10th June, 1962.

Sandwich Tern (*Thalasseus sandvicensis*). D.S. saw ten at 42°00'N. 10°00'W. on 28th August, 1962, four off Cape Finistere on 27th August, 1961, and three there on 17th September, 1962, three at 14°24'N. 17°46'W. off West Africa on 2nd September, 1961, three nearby at 14°36'N. 17°34'W. on 18th April, 1962, thirty at 07°43'N. 13°53'W. on 22nd April, 1962, some at 11°01'N. 17°20'W. the following day, and four at 15°37'N. 17°37'W. the day after. C.C.A. saw twelve in Dakar Bay on 15th May, 1962, and D.S. ten at Monrovia on 20th April, 1962 and three there on 10th June, 1962; he also saw one at 18°38'N. 17°35'W. on 7th June, 1962 and five at 13°35'N. 17°29'W. the next day.

Common Noddy (*Anous stolidus*). In the Caribbean T.N.G. reports fifty noddies at 14°55'N. 67°31'W. on 13th November, 1961, while in the South Atlantic R.O.M. reports that they were seen off Martin Vas on 4th December, 1960 and Ascension on 8th May, 1961. T.F.S.F. saw a possible bird in the East Indies at 03°16'S. 106°26'E. on 10th August, 1961.

White-capped Noddy (*Anous minutus*). In the Atlantic R.O.M. reports one on board H.M.S. Owen at 10°00' 53'W. on 17th November, 1960, and ten off Ascension on 8th May, 1961; in the Pacific J.G.W. reports six at 12°32'S. 140°47'W. on 3rd October, 1962.

White Tern (*Gygis alba*). J.G.W. reported one in the Caribbean at 14°27'N. 71°25'W. on 18th September, 1962, which seems rather outside the normal range of the species. R.O.M. reported ten off Ascension

on 8th May, 1961, T.F.S.F. two off the East Indies over the Pontianak Banks at 08°00'N. 150°55'E. on 20th September, 1961, and E.J.D. one at 08°00'N. 150°55'E. on 13th December, 1961. In the North Pacific B.F.K. saw three at 22°04'N. 163°58'W. on 17th January, 1960 and found them common over and around Guam in April.

AUKS (*ALCIDAE*)

Little Auk (*Plautus alle*). Among other records, S.C. reports the sea "littered" with birds in winter plumage at 61°01'N. 64°47'W. on 24th September, 1961, and one on board at 50°15'N. 26°33'W. on 30th March, 1962. K.D.A.L. saw seven at 43°N. 53°W. on 9th April, 1962 and two at 41°N. 62°W. next day, also four at 39°N. 44°W. on 28th November, 1962 and a large flock at 44°N. 60°W. on 9th December, 1962.

Guillemot (*Uria aalge*). R.W. saw two at 47°23'N. 47°43'W. on 20th December, 1961 and K.D.A.L. large numbers moving west and W.N.W. in small parties with skuas over a rough sea with a heavy westerly swell at 48°03'N. 39°05'W. in the late evening of 13th March, 1962, and also 25 which overtook the ship at 25-30 kts. at 46°04'N. 42°04'W. on 27th March, 1962.

B.F.K. saw a number of species around Japan, including two Brunich's Guillemots (*Uria lomvia*) 110 miles east of Fudai, N. Honshu at 40°00'N. 143°54'E. on 22nd February, 1960, Ancient Murrelets (*Synthliboramphus antiquus*) in Tokyo Bay on 26th January and 4th April, 1960, and in the Shimouseki Straits on 31st January, 1960, a Crested Murrelet (*Synthliboramphus wumizusume*) at 34°42'N. 140°59'E. on 16th April, 1960, and a possible Least Auklet (*Aethia pusilla*) at 40°00'N. 143°54'E. on 22nd February, 1960. He had excellent views of all except the last, described as a sparrow-sized auklet flushed close to the ship, which was dark above and white below, and seemed even smaller than a Little Auk.

BIRD-IN-HAND FORMS

Thirteen reports is a considerable increase on the nine last year and seven the year before. These records clearly provide very valuable firm identifications for individual species from little-known areas, and details of such characteristics as their water-temperature preferences, overall length and wingspan, and the colour of their soft parts in life (these details are reported under individual species in the preceding list). Unfortunately, even with the use of detailed questionnaires we are still having some difficulty with identifications. Thus, among the records cited here, the seventh, originally identified as a Madeiran Storm-petrel, had wing and tail lengths of ca. 147 mm. and 68 mm., which could fit any of Leach's, Wilson's or the Madeiran Storm-petrels, the tarsus too long (30.5 mm.) and the toe too short (20 mm.) for the first two, and both too short for the third, the bill too long for any of them (17 mm.), and a rump-pattern which could fit either Wilson's or the Madeiran Storm-petrel, though neither is likely to occur so far north at this season. Equally, of the last two records, here provisionally allocated to the Brown-winged Tern, the sketch accompanying the first looks rather like a Sooty Tern except that the back is described as dark smoky grey, and it was originally reported as this; but the wing, tail and bill measurements of 250 mm., 144 mm. and 40 mm. are short and agree better with a Brown-winged Tern; while the sketch of the second agrees as well with a young Brown-

BIRD-IN-HAND FORMS

SPECIES	OBSERVER	DATE	PLACE	SEA TEMP.
GREAT-WINGED PETREL (<i>Pterodroma macroptera</i>)	J. A. F. Jenkins ...	11.11.61	36°07'S. 166°41'E.	18°C.
BRITISH STORM-PETREL (<i>Hydrobates pelagicus</i>)	D. Stam	15.5.62	12°N. 17°W.	19°C.
LEAST STORM-PETREL (<i>Halocyptena microsoma</i>)	W. A. Kennedy ...	3.2.62	6½m. off Cabo Mala, Panama	
LEACH'S STORM-PETREL (<i>Oceanodroma leucorhoa</i>)	D. Stam	3.11.61	24°55'N. 16°30'W.	20°C.
LEACH'S STORM-PETREL (<i>Oceanodroma leucorhoa</i>)	W. N. H. Jarvis ...	6.11.61	9°N. 30°W.	26°C.
LEACH'S STORM-PETREL (<i>Oceanodroma leucorhoa</i>)	K. D. A. Lamb ...	4.5.62	41°40'N. 57°70'W.	18°C.
MADEIRAN STORM-PETREL? (<i>Oceanodroma castro?</i>)	T. N. Guina	5.11.61	45°06'N. 16°00'W.	17°C.
WHITE-TAILED TROPIC-BIRD (<i>Phaethon lepturus</i>)	R. O. Morris	4.2.62	04°12'N. 71°20'E.	28°C.
RED-BILLED TROPIC-BIRD (<i>Phaethon aethereus</i>)	W. A. Kennedy ...	30.8.62	02°35'N. 78°40'W.	28°C.
GREY PHALAROPE (<i>Phalaropus fulicarius</i>)	A. Semple	4.12.61	01°50'N. 100°00'W.	26°C.?
SOOTY TERN, immature (<i>Sterna fuscata</i>)	W. N. H. Jarvis ...	5.11.61	08°N. 22°30'W.	30°C.
BROWN-WINGED TERN? adult? (<i>Sterna anaethetus?</i>) ...	T. F. S. Fripp ...	29.12.61	05°57'S. 108°18'E.	29°C.
BROWN-WINGED TERN? immature? (<i>Sterna anaethetus?</i>)	J. G. Worgan	16.9.62	18°15'N. 64°08'W.	29°C.

winged Tern as anything, although the measurements as they stand hardly agree with those of any tern known from the region where it was reported. It seems clear that we shall have to redesign the bird-in-hand forms to make them easier to fill in; meanwhile, it is becoming increasingly clear that in case of doubt feathers or photographs are very helpful indeed in confirming difficult identifications which must at times defeat even the most careful observers.

REPORTS ON LAND BIRDS AT SEA

Analysis compiled by Captain G. S. Tuck, D.S.O., R.N.

RECORDS FOR 1962 AND 1963

Only land birds reported as positively identified are included in this analysis.

The actual position is shown in latitude and longitude; where the position is described in words this is purely as a guide.

Where the letter d. followed by a point of the compass appears after the name of a bird this indicates the recorded direction of departure flight.

The scientific title has been omitted on occasions where in any one series of observations the same species is reported again, not necessarily the same bird.

INTRODUCTION

An analysis of land birds identified at sea during 1960 and 1961 was included in *Sea Swallow*, 1961. The continuing interest shown by our members in this aspect of our work is reflected in the great number of report sheets received during the past two years. These reports naturally include many unidentified sightings, but it is important that all observations with supporting notes should be included whether the ship is in harbour, off-shore or in the open sea.

The object of the present analysis however, as in the previous one, is not to include birds identified close inshore but out at Sea. For this reason observations within sight of land have been omitted in most cases.

Full and detailed records from the Mediterranean sea have been drastically curtailed. The massive migratory movements across the Mediterranean are well known already, and occur in the main at heights beyond visual identification.

A repetition of the innumerable sightings of Turtle Doves, Swallows, Wagtails, Wheatears, Small Warblers, etc., that have been reported would become monotonous. A few selected observations, perhaps of more than passing interest, are given however. I would like to record my thanks to all who have contributed reports on land birds.

LAND BIRDS EXAMINED IN THE HAND FORMS

SPECIES	OBSERVER	DATE	PLACE
		1962	
WHEATEAR (<i>Oenanthe oenanthe</i>)	S. E. Chapman	18.9.62	53°28'N. 21°57'W.
BARN SWALLOW (<i>Hirundo rustica</i>)	J. H. Agnew	17.11.62	11°N. 77°W.
COMMON SWALLOW (<i>Hirundo rustica</i>)	R. O. Morris	26.10.62	5°30'N. 113°05'E.
GARDEN WARBLER (<i>Sylvia borin</i>)	J. G. Worgan	7.9.62	45°40'N. 20°10'W.
CLIFF SWALLOW (<i>Petrochelidon pyrrhonota</i>)	J. G. Wogan	19.9.62	11°57'N. 76°15'W.
SONG THRUSH (<i>Turdus ericetorum</i>)	P. P. O. Harrison	22.12.62	35°11'N. 35°49'E.
CARIBBEAN ELAENIA (<i>Elaenia martinica</i>)	W. A. Kennedy	9.5.62	28°27'N. 78°10'W.
BARN SWALLOW (<i>Hirundo rustica</i>)	W. A. Kennedy	3.5.62	24°48'N. 88°20'W.
OLIVE TREE WARBLER (<i>Hippolais olivetorum</i>)	P. P. O. Harrison	9.5.62	34°41'N. 24°40'E.
QUAIL (<i>Coturnix coturnix</i>)	P. P. O. Harrison	6.5.62	34°34'N. 30°11'E.
RED BACKED SHRIKE (<i>Lanius collurio</i>)	G. S. Willis	2.5.62	25°26'N. 57°33'E.
QUAIL (<i>Coturnix coturnix</i>)	G. S. Willis	13.2.62	17°16'N. 56°23'E.
REDSTART (<i>Phoenicurus phoenicurus</i>)	S. E. Chapman	29.4.62	English Channel
GOLDEN PLOVER (<i>Pluvialis apricaria</i>)	S. E. Chapman	25.2.62	50°15'N. 30°11'W.
QUAIL (<i>Coturnix coturnix</i>)	P. P. O. Harrison	6.5.62	34°34'N. 30°11'E.
	1963		
BLACKCAP (<i>Sylvia atricapilla</i>)	P. P. O. Harrison	7.2.63	34°33'N. 30°27'E.
CHIFF CHAFF (<i>Phylloscopus collybita</i>)	P. P. O. Harrison	19.3.63	37°11'N. 11°28'E.
SUBALPINE WARBLER (<i>Sylvia cantillans</i>)	P. P. O. Harrison	21.4.63	35°43'N. 17°44'E.
RED BACKED SHRIKE (<i>Lanius collurio</i>)	P. P. O. Harrison	27.8.63	34°34'N. 31°11'E.
BLACK REDSTART (<i>Phoenicurus ochruros</i>)	P. P. O. Harrison	13.9.63	37°05'N. 5°20'E.
SPOTTED FLYCATCHER (<i>Muscicapa striata</i>)	P. P. O. Harrison	24.9.63	32°22'N. 10°58'W.



BLACK KITES ON THE YARD OF H.M. YACHT BRITANNIA
Red Sea, April, 1963

LAND BIRDS AT SEA

EASTERN NORTH ATLANTIC—EAST OF 30°W. AND NORTH OF 30°N.—1962

FROM RECORDS OF: Capt. D. Stam, Netherland, s.s. "Joseph Frering," Chief Engineer L. J. Macinnes, s.s. "Otina," 3rd Officer N. G. Cheshire, m.v. "British Osprey," Capt. C. C. Atkinson, s.s. "Clan Mackintosh," Capt. P. P. O. Harrison, s.s. "Kent," 2nd Officer T. N. Guina, s.s. "British Signal," Capt. R. Walgate, s.s. "Beaverdell," Capt. E. F. Aikman, s.s. "Beaverglen," 2nd Officer M. E. Jones, s.s. "Overseas Courier," App. S. E. Chapman, s.s. "Birmingham City."

DATE	POSITION	SPECIES	REMARKS
Jan. 1	42°48'N. 09°40'W. West of Portugal	1 DUNLIN (<i>Calidris alpina</i>)	
Jan. 2	49°38'N. 6°41'W.	1 REDWING (<i>Turdus musicus</i>) d.NE 1 SONG THRUSH (<i>Turdus ericetorum</i>) 3 STARLINGS (<i>Sturnus vulgaris</i>)	
Feb. 23	51°18'N. 15°05'W. 200 miles west of S. Ireland	1 WOODCOCK (<i>Scolopax rusticola</i>) 2 LAPWINGS (<i>Vanellus vanellus</i>) d.S. 1 SONG THRUSH (<i>Turdus ericetorum</i>) 1 GOLDEN PLOVER (<i>Charadrius apricarius</i>)	
Feb. 24	51°08'N. 22°48'W.	3 GOLDEN PLOVER 5 LAPWINGS 31 GOLDEN PLOVER in 3 groups of 4, 11 and 16	One landed on deck. At least 20 birds on deck, nearly all in full winter plumage. These birds remained about the ship until 45°N. 50°W., many dying.
Feb. 25	50°10'N. 30°W. Mid N. Atlantic	24 GOLDEN PLOVER in 2 groups of 10 and 14 5 LAPWINGS d.WSW	Passed close to ship.
Feb. 25	45°31'N. 15°05'W.	1 TURNSTONE (<i>Arenaria interpres</i>) 2 GOLDEN PLOVER	Circled ship for 5 minutes. 1 remained on board for 2 days; the other died, a female of southern race.

LAND BIRDS AT SEA

DATE	POSITION	SPECIES	REMARKS
March 17 to 21	50°N. 11°W. to south of Sable I.	2 CHAFFINCHES (<i>Fringilla coelebs</i>). One flew off next day d.NE. at 49°30'N. 20°W.	1 male remained on board until close to Canadian Coast, but was blown away in NE gale and must have perished.
March 21	44°18'N. 23°04'W.	1 TREE PIPIT (<i>Anthus trivialis</i>).	Perched on masts. Closely observed.
April 2	56°44'N. 18°18'W.	1 MEADOW PIPIT (<i>Anthus pratensis</i>)	Picked up dead.
April 6	42°12'N. 09°26'W.	1 PIED WAGTAIL (<i>Motacilla alba</i>) 1 SONG THRUSH (<i>Turdus ericetorum</i>)	
April 12	37°49'N. 9°58'W.	2 WOODCHAT SHRIKE (<i>Lanius senator</i>)	
April 29	51°18'N. 09°46'W. 10 miles SE of Fastnet Rock Lt. H.	3 WHEATEARS (<i>Oenanthe oenanthe</i>) 1 COMMON REDSTART (<i>Phoenicurus phoenicurus</i>). Male 1 WHIMBREL (<i>Numenius phaeopus</i>) 3 SWIFTS (<i>Apus apus</i>) d.E.	Landed on board.
April 30	51°40'N. 14°35'W.	1 COMMON REDSTART 2 WHIMBREL 2 SWALLOWS (<i>Hirundo rustica</i>) 1 SAND MARTIN (<i>Riparia riparia</i>)	Picked up dead. One measured, fed and released. On deck.
April 29	48°57'N. 7°19'W. 47°38'N. 7°49'W. Pt. du Raz (France) 080°, 129 miles	1 BLACKBIRD (<i>Turdus merula</i>) d.E. 1 JACK SNIFE (<i>Lymnocyptes minimus</i>) 1 TURTLE DOVE (<i>Streptopelia turtur</i>)	
April 30	43°44'N. 9°24'W. C. Sisargus (Spain) 134°, 33 miles	1 LITTLE STINT (<i>Calidris minuta</i>)	Landed on ship.

May	1	51°16'N. 21°47'W.	1 SAND MARTIN (<i>Riparia riparia</i>) 2 SWALLOWS (<i>Hirundo rustica</i>) 3 WHIMBREL (sec April 30th) 1 TURTLE DOVE (<i>Streptopelia turtur</i>)	Landed on board. About ship. One was measured.
May	2	50°25'N. 29°42'W. 55°07'N. 24°57'W.	6 SWALLOWS (<i>Hirundo rustica</i>) 1 SWIFT (<i>Apus apus</i>) 1 SWALLOW	Died on board.
May	11	36°42'N. 12°45'W.	2 TURTLE Doves (<i>Streptopelia turtur</i>)	Remained on board until off Dakar.
May	12	32°30'N. 14°16'W.	1 HOUSE MARTIN (<i>Delichon urbica</i>)	
May	15	44°47'N. 8°14'W.	1 TURTLE DOVE (<i>Streptopelia turtur</i>)	
May	18	54°07'N. 24°56'W.	1 WIGEON (<i>Anas penelope</i>). Male, d.E.	Close sighting identifying as male.
May	21	41°03'N. 9°39'W. 50 miles off Portu- guese coast	1 PIGEON sp.	
May	22	36°30'N. 8°W. 40 miles off Portu- guese coast	4 TURTLE Doves (<i>Streptopelia turtur</i>)	
May	27	32°14'N. 15°20'W.	1 SWALLOW (<i>Hirundo rustica</i>) d.NE 1 TURTLE DOVE (<i>Streptopelia turtur</i>)	
May	28	56°02'N. 14°58'W.	1 NIGHTINGALE (<i>Luscinia megarhynchos</i>)	
May	31	51°05'N. 20°43'W.	1 HOUSE SPARROW (<i>Passer domesticus</i>) female	On board.
June	1	47°44'N. 5°53'W. Bay of Biscay	1 SWALLOW (<i>Hirundo rustica</i>) 1 HOUSE MARTIN (<i>Delichon urbica</i>) 1 SWIFT (<i>Apus apus</i>) d.NW 1 TURTLE DOVE (<i>Streptopelia turtur</i>) 1 COLLARED TURTLE DOVE (<i>Streptopelia decaocta</i>) 1 REDSTART (<i>Phoenicurus phoenicurus</i>)	

LAND BIRDS AT SEA

Forty-six

DATE	POSITION	SPECIES	REMARKS
June 3	38°34'N. 11°19'W.	1 SWALLOW	
June 4	33°38'N. 13°11'W.	1 TURTLE DOVE 1 HOUSE MARTIN	
June 18	32°57'N. 13°46'W.	1 SWIFT (<i>Apus apus</i>)	
July 25	52°25'N. 19°11'W.	1 TURNSTONE (<i>Arenaria interpres</i>)	Examined on board. Finally flew off and came down in sea.
August 29	50°14'N. 12°35'W.	2 CURLEW (<i>Numenius arquata</i>) d.E	
August 7	45°40'N. 20°10'W.	1 GARDEN WARBLER (<i>Sylvia borin</i>)	Examined in hand. On board 2 days, released 3 mls. from Flores (Azores).
Sept. 13	50°38'N. 8°20'W.	1 WHEATEAR (<i>Oenanthe oenanthe</i>) 1 SANDERLING (<i>Crocethia alba</i>), juvenile	On board. On board.
Sept. 17	52°37'N. 15°35'W.	1 WHEATEAR (<i>Oenanthe oenanthe</i>)	On board.
Sept. 18	53°28'N. 21°57'W.	2 WHEATEARS	On board. 1 died (examination form rendered).
Oct. 21	48°48'N. 07°06'W. Western approaches	6 STARLINGS (<i>Sturnus vulgaris</i>) 3 CHAFFINCHES (<i>Fringilla coelebs</i>)	2 male, 1 female roosted on board. Many finches on board, many young and tired.
Oct. 23	36°16'N. 09°22'W. West of Straits of Gibraltar	1 QUAIL (<i>Coturnix coturnix</i>)	Caught on board and released next day.
Nov. 1	53°08'N. 23°13'W. 52°53'N. 20°29'W.	1 REDWING (<i>Turdus musicus</i>) 2 TURNSTONES (<i>Arenaria interpres</i>)	On board. Flying round ship.
Nov. 2	52°15'N. 15°26'W. 200 miles west of Ireland	2 MALLARD (<i>Anas platyrhynchos</i>)	Male and female. Alighted on sea. (See Here and There with the Birds).

LAND BIRDS AT SEA

EASTERN NORTH ATLANTIC—EAST OF 30°W. AND NORTH OF 30°N.—1963

FROM RECORDS OF: Capt. P. P. O. Harrison, s.s. "Kent." Capt. E. F. Aikman, s.s. "Beaver Glen." Chief Engineer L. J. MacInnes, s.s. "Otina." Chief Officer K. D. A. Lamb, s.s. "Sylvania." Apprentice S. F. Chapman, s.s. "Birmingham City." Capt. W. N. H. Jarvis, s.s. "Prospero."

DATE	POSITION	SPECIES	REMARKS
January 7	47°38'N. 7°40'W. 122 miles west of Brest	DOZENS OF BLACKBIRDS (<i>Turdus merula</i>) and FIELDFARES (<i>Turdus pilaris</i>)	
January 13 to 18	Between 48°N. 07°W. and 39°N. 09°W. 150 miles west of Brest	12+ LAPWINGS (<i>Vanellus vanellus</i>) 8+ STARLINGS (<i>Sturnus vulgaris</i>) 1 CURLEW (<i>Numenius arquata</i>)	Ship was riding out an easterly gale. These birds kept company with the ship over the period, the Curlew for 2 days only.
January 13	300 miles west of N. Ireland. 600m. south of Iceland	3 PEREGRINE FALCONS (<i>Falco peregrinus</i>)	In close company with the ship for ½ hour, often diving to sea level.
January 12	51°26'N. 15°W.	20 STARLINGS (<i>Sturnus vulgaris</i>)	
January 14	50°30'N. 30°W. Mid N. Atlantic	1 SONG THRUSH (<i>Turdus ericetorum</i>) 1 BLACKBIRD (<i>Turdus merula</i>) 1 SNIPE 1 FIELDFARE (<i>Turdus pilaris</i>)	All on board.
April 5	48°25'N. 17°40'W.	1 LAPWING (<i>Vanellus vanellus</i>)	Landed on deck. Wind was WNW, force 9, on previous day.
Feb. 5	36°34'N. 07°45'W. Cape Santa Maria, Portugal, 25 miles	1 HOOPOE (<i>Upupa epops</i>) d.N.	

LAND BIRDS AT SEA

DATE	POSITION	SPECIES	REMARKS
May 26	4 miles south of Bishop Rock	1 TURTLE DOVE (<i>Streptopelia turtur</i>)	On board. Finally presented to London Zoo (see separate section of <i>Sea Swallow</i>).
June July	NO RECORDS TO DATE		
August 19	58°53'N. 24°17'W.	2 RINGED PLOVERS (<i>Charadrius hiaticula</i>) d.E.	Confirmed by 3 different observers.
August 21	35 miles NW of Cape Wrath	1 RINGED PLOVER, d.E. 1 OYSTER CATCHER (<i>Haematopus ostralegus</i>)	
August 31	58°44'N. 11°25'W.	1 BLUE-HEADED WAGTAIL (<i>Motacilla l. flava</i>)	On board.
Sept. 18	59°34'N. 26°32'W.	OVER 50 BLUE-HEADED WAGTAILS 1 SPARROW HAWK (<i>Accipiter nisus</i>) d.S.	On board all day. Closely observed. Perched on foremast light.

LAND BIRDS AT SEA

EASTERN NORTH ATLANTIC—EAST OF 30°W. AND SOUTH OF 30°N.—1962

FROM RECORDS OF: Capt. D. Stam, Netherland s.s. "Joseph-Frereng."

DATE	POSITION	SPECIES	REMARKS
June 6	23°52'N. 16°50'W.	1 RUFOUS WARBLER (<i>Agrobates galactotes</i>)	On board. Kept in aviary.
July/Aug.	NO RECORDS		
Sept. 1	22°37'N. 17°03'W. Off coast of Spanish Sahara	6 NIGHTINGALES (<i>Luscinia megarhynchos</i>) 7 REED WARBLERS (<i>Acrocephalus scirpaceus</i>) 1 AQUATIC WARBLER (<i>Acrocephalus paludicola</i>) 1 SUBALPINE WARBLER (<i>Sylvia cantillans</i>) 1 GRASSHOPPER WARBLER (<i>Locustella naeria</i>) 2 SEDGE WARBLERS (<i>Acrocephalus schoenobeanus</i>) 1 WHITETHROAT (<i>Sylvia communis</i>) 2 RUFOUS WARBLERS (<i>Agrobates galactotes</i>) 2 REDSTARTS (<i>Phoenicurus phoenicurus</i>) 6 WOODCHAT SHRIKES (<i>Lanius senator</i>) 3 HOOPoes (<i>Upupa epops</i>) 2 GARDEN WARBLERS (<i>Sylvia borin</i>) 2 WILLOW WARBLERS (<i>Phylloscopus trochilis</i>) 3 TURTLE DOVES (<i>Streptopelia turtur</i>) 3 SWALLOWS (<i>Hirundo rustica</i>) 1 SWIFT (<i>Apus apus</i>)	A great diversity of birds arriving and remaining whole day on board. 7 birds died and were sent to Professor K. H. Voous. Ship steering south, weather fine, wind variable, force 2.

LAND BIRDS AT SEA

DATE	POSITION	SPECIES	REMARKS
Sept. 29	18°06'N. 17°33'W. Off coast of French West Africa	2 NIGHTINGALES 2 GARDEN WARBLERS 2 SPOTTED FLYCATCHERS (<i>Muscicapa striata</i>) 1 PIED FLYCATCHER (<i>Muscicapa hypoleuca</i>) 1 REDSTART 1 WOODCHAT SHRIKE 1 REED WARBLER 2 WILLOW WARBLERS 4 TURTLE DOVES	All birds arrived p.m. and remained on board overnight. Ship steering south, weather fine, wind south, force 2.
		1963	
		NO RECORDS RECEIVED UP-TO-DATE	

LAND BIRDS AT SEA

WESTERN NORTH ATLANTIC—WEST OF 30°W. AND NORTH OF 30°N.—1962

FROM RECORDS OF: 2nd Officer M. E. Jones, s.s. "Overseas Courier." Apprentice S. E. Chapman, s.s. "Birmingham City."
Capt. E. F. Aikman, s.s. "Beaverlake." Chief Officer K. D. A. Lamb, s.s. "Sylvania." Capt. A. J. F.
Colquhoun, M.V. "Sidonia."

DATE	POSITION	SPECIES	REMARKS
January 24	37°21'N. 71°46'W. 250 miles East of Norfolk, Va.	4 REDPOULS (<i>Carduelis flammea</i>) d.N.	On board at close range.
Feb. 26	48°44'N. 37°48'W.	10 GOLDEN PLOVER (<i>Charadrius apricarius</i>)	On board; very weak, most died.
Feb. 27	48°10'N. 44°35'W. Approx. 600' East of Newfoundland	Only 2 Golden Plovers remained alive	
March 13	36°52'N. 75°51'W. Off coast of Virginia	1 FOX SPARROW (<i>Passerella iliaca</i>)	On board at close range.
March 18	40°14'N. 41°57'W. 600 miles West of Azores, 800 miles SE of Cape Race	1 STARLING (<i>Sturnus vulgaris</i>)	Probably hit navigation light. Found dead.
April 11	38°25'N. 73°02'W. 50 miles East of Norfolk, Va.	2 FLICKERS (<i>Colaptes auratus</i>) 3 AMERICAN ROBINS (<i>Turdus migratorius</i>) 1 BROWN (TREE) CREEPER (<i>Certhia familiaris</i>) 2 GOLDEN-CROWNED KINGLETS (<i>Regulus satrapa</i>) 3 COWBIRDS (<i>Molothrus ater</i>) 1 SLATE-COLOURED JUNCO (<i>Junco hyemalis</i>) 4 SONG SPARROWS (<i>Melospiza melodia</i>)	One ringed A2951. On board all day. One ringed A2952. On board all day. Injured and died. Female ringed A253. All on board.

LAND BIRDS AT SEA

DATE	POSITION	SPECIES	REMARKS
April 12	At Newport News, Va.	1 PHOEBE (<i>Sayornis phoebe</i>)	Ringed A254.
April 13	37°42'N. 72°15'W.	1 MEADOW LARK (<i>Sturnella magna</i>) 1 SLATE-COLOURED JUNCO 2 TOWHEE (<i>Pipilo erythrophthalmus</i>) 1 WHITE-THROATED SPARROW (<i>Zonotrichia albicollis</i>) 1 OVEN BIRD (<i>Seiurus aurocapillus</i>) 5 SONG SPARROWS 1 SNOWY EGRET (<i>Leucophoyx thula</i>) 1 WOOD THRUSH (<i>Hylocichla mustelina</i>)	On board all day. On board at close range. Ringed A255. Ringed A256. On board all day. On board.
April 14	39°11'N. 66°06'W.	1 MOURNING DOVE (<i>Zenaidura macroura</i>)	
April 14	40°3'N. 63°9'W. Off New York	1 GREAT BLUE HERON (<i>Ardea herodias</i>)	Made several attempts to alight on board.
May 3	49°27'N. 36°05'W.	4 TURTLE DOVES (<i>Streptopelia turtur</i>) 2 TURNSTONE (<i>Arenaria interpres</i>)	Sitting on foredeck. Stayed aboard 2 days. Landed on deck, finally entered cabin. Both weak and died.
May 3	51°51'N. 33°06'W.	2 SWALLOW (<i>Hirundo rustica</i>) 1 SWIFT (<i>Apus apus</i>) d.E.	
May 8	Off Nantucket I. Vessel	c. 200 RED (GREY) PHALAROPES (<i>Phalaropus fulicarius</i>)	Ship passed within 100 yards of flock settled on glassy, calm water. Specific identification easy.
May 27	46°52'N. 57°16'W. 200 miles East of Cape Race	4 WHITE-THROATED SPARROWS (<i>Zonotrichia albicollis</i>) 2+ SWAMP SPARROWS (<i>Melospiza georgiana</i>) 1 OVEN-BIRD (<i>Seiurus aurocapillus</i>) 1 WILSON'S WARBLER (<i>Wilsonia pusilla</i>)	All died. 1 died. Died. Died.

June	17	42°4'N. 47°1'W.	1 AMERICAN BLUE GOOSE (<i>Chen caerulescens</i>)	First seen swimming in the sea, then took wing.
July				
August	22	59°17'N. 46°34'W.	2 TURNSTONE (<i>Arenaria interpres</i>) d.N.	
August	27	53°18'N. 32°45'W.	1 WHEATEAR (<i>Oenanthe oenanthe</i>)	On board at close range, possibly Greenland sub-species.
Sept.	14	45°57'N. 54°17'W.	1 YELLOW-BROWED WARBLER (<i>Phylloscopus inornatus</i>)	On board several days. Died, sent to British Museum Nat. Hist.
			1 BLACK AND WHITE WARBLER	Hit wire and was killed.
Sept.	22	52°13'N. 53°18'W.	1 PEREGRINE FALCON (<i>Falco peregrinus</i>)	On board.
Oct.	12	7 miles East of Ambrose Light Vl.	21 CANADA GEESE (<i>Branta canadensis</i>)	Flew across bows of ship.
Oct.	13	40°5'N. 66°2'W. 400 miles East of New York, 250m. South of G. Sable	Scores of small land birds on board, including 1 FLICKER (<i>Colaptes auratus</i>)	Two sparrows (species unknown) still on board off coast of Ireland. Flicker on board for 4 days. Ship steering East at 20 knots.
Oct.	29	53°30'N. 43°W.	1 SNOW BUNTING (<i>Plectrophenax nivalis</i>)	On board.

LAND BIRDS AT SEA

WESTERN NORTH ATLANTIC—WEST OF 30°W. AND NORTH OF 30°N.—1963

FROM RECORDS OF: Capt. E. F. Aikman, s.s. "Beaverlegen." 2nd Officer R. S. Hawkins, m.v. "Regent Falcon." Apprentice S. F. Chapman, s.s. "Birmingham City."

DATE	POSITION	SPECIES	REMARKS
January		NO RECORDS TO DATE	
February		2 EVENING GROSBREAK (<i>Hesperiphona hesperina</i>)	Feeding on wheat, maize and flax on board.
March 13	14 miles SE Cape Sable, Nova Scotia	3 EVENING GROSBREAK 6 PURPLE FINCH (<i>Carpodacus purpureus</i>)	Feeding on deck.
April 2	44°46'N. 51°54'W.	1 SONG SPARROW (<i>Melospiza melodia</i>)	One inch of snow fell. Bird very active.
April 3	45°40'N. 47°29'W.	1 SONG SPARROW (same bird as above) 1 SNOW BUNTING (<i>Plectrophenax nivalis</i>)—Male	On board for 24 hours.
April 20	40°N. 68°W. East of New York	Several HOUSE SPARROWS (<i>Passer domesticus</i>) 1 WHITE THROATED SPARROW (<i>Zonotrichia albicollis</i>) 1 SLATE COLOURED JUNCOS (<i>Junco hyemalis</i>)	
April 21	40°N. 58°W.	2 SLATE COLOURED JUNCOS	
April 21	780 miles East of New York. 400m. from Nova Scotia	1 BROWN THRASHER (<i>Toxostoma rufum</i>)	Flew into Captain's charthouse.

May	7	48°42'N. 62°39'W. East of Anticosti Island	1 AMERICAN KESTREL (<i>Falco sparverius</i>) 1 PINE GROSBEAK (<i>Pinicola enucleator</i>) 1 BRONZED GRACKLE (<i>Quiscalus versicolour</i>)	On board. Died. Identified at Redpath Museum, Montreal.
May	15	30°30'N. 43°52'W. Bermuda W. 1080 miles, Flores N.E. 820 miles	1 HOBBY (<i>Falco subbuteo</i>).	Closely observed on board. Very detailed description, including chestnut vent and thighs, small size, and dashing flight.
June	22	50°N. 61°20'W.	1 AMERICAN PIPIT	Died. Identified at Redpath Museum.
July			NO RECORDS TO DATE	
August	5	52°13'N. 52°17'W.	1 HOUSE SPARROW	Took passage across Atlantic to English Channel. Fed on grain cargo.

WESTERN NORTH ATLANTIC—WEST OF 30°W. AND SOUTH OF 30°N.—LATE REPORT FOR 1961

DATE	POSITION	SPECIES	REMARKS
Nov. 25	24°57'N. 39°49'W. 1,000 miles approx. from nearest land	1 OSPREY (<i>Pandion haliaetus</i>)	Landed on board in mid ocean. Closely observed. Detailed report: Span about 5 feet. Head nigger brown with white throat and collar extend- ing half way around neck. Some white on crown. Large curved dark brown beak. Feathers at back of head ruffled. Body upper half nigger brown, also top side of wings. Underparts white, flecked with brown. Wings have ragged tips. Legs grey and without feathers. Four large curved talons, three at front and one at rear.

LAND BIRDS AT SEA

MEDITERRANEAN SEA — SELECTED EXTRACTS — 1962

FROM RECORDS OF: H.M.S. "Owen." Chief Engineer L. J. MacInnes, S.S. "Otina." Capt. P. P. O. Harrison, S.S. "Kent."

DATE	POSITION	SPECIES	REMARKS
Jan./Feb.	NO EXTRACTS INCLUDED		
March 31	34°54'N. 30°E. 130 miles West of Cyprus	1 STONE CURLEW (<i>Burhinus oedicnemus</i>)	On board.
April 17	32°12'N. 29°47'E. N. of Alexandria	1 STONE CURLEW d.N.	On board.
April 15	34°34'N. 30°07'E.	2 SQUACCO HERONS (<i>Ardeola ralloides</i>)	On board.
May 5	35°06'N. 22°30'E. 50 miles West of Crete	1 GREAT WHITE HERON (<i>Egretta alba</i>) 1 SQUACCO HERON, immature, d.N.	
May 6	34°33'N. 30°31'E. 100 miles West of Cyprus	1 PEREGRINE FALCON (<i>Falco peregrinus</i>)	On board.
May 8	34°34'N. 30°E.	1 GOLDEN ORIOLE (<i>Oriolus oriolus</i>)	
May 11	37°43'N. 9°25'E. Between Tunisia & Sardinia	7 GREAT WHITE HERONS (<i>Egretta alba</i>) d.N.	
May 12	36°45'N. 0°39'E. 25 miles North of Algerian Coast	2 SQUACCO HERONS	
May 27	34°27'N. 32°01'E. North of Port Said	1 NIGHT HERON (<i>Nycticorax nycticorax</i>) d.N.	
June	NO EXTRACTS		
July 3	35°57'N. 6°W.	1 GREAT WHITE HERON (<i>Egretta alba</i>) d.N.	

LAND BIRDS AT SEA

AREAS OF PERSIAN GULF, ARABIAN SEA, NORTH INDIAN OCEAN AND BAY OF BENGAL—1962
FROM THE RECORDS OF: Chief Engineer L. J. Macinnes, s.s. "Otina." 3rd Officer N. G. Cheshire, m.v. "British Osprey."

DATE	POSITION	SPECIES	REMARKS
January	No RECORDS		
February			
March			
April 29	Persian Gulf	2 YELLOW WAGTAILS (<i>Motacilla flava</i>)	On board for two days.
May 2	25°26'N. 57°33'E. Gulf of Oman	1 RED-BACKED SHRIKE (<i>Lanius collurio</i>)	Examined in hand.
June/July	No RECORDS		
August 10	28°43'N. 50°E. North Persian Gulf	1 HERON (<i>Ardea cinerea</i>)	
August 13	6 miles South of C. Mouze, Pakistan	1 ROSY STARLING (<i>Sturnus roseus</i>) 2 TURTLE DOVES (<i>Streptopelia turtur</i>) 2 COLLARED TURTLE DOVES (<i>Streptopelia decaocto</i>)	
Sept. 14	25°06'N. 57°48'E. Gulf of Oman	1 YELLOW WAGTAIL (<i>Motacilla flava</i>)	On board.
Sept. 18	29°25'N. 49°12'E.	1 YELLOW WAGTAIL (<i>Motacilla flava</i>)	On board.
Sept. 20	24°49'N. 59°07'E. Gulf of Oman	1 YELLOW WAGTAIL (<i>Motacilla flava</i>)	On board.
Sept. 21	22°15'N. 64°56'E.	1 HERON (<i>Ardea cinerea</i>) d.S.W.	
Sept. 21	300 miles East of Ras al Hadd, Gulf of Aden	1 CRESTED LARK (<i>Galerida cristata</i>) 1 PIPIT (<i>Anthus sp.</i>)	Remained amongst deck cargo of horses and cattle all way to India.
Sept. 22	19°41'N. 70°37'E. 50 miles South of Port Diss	1 TURTLE DOVE (<i>Streptopelia turtur</i>)	

LAND BIRDS AT SEA

DATE	POSITION	SPECIES	REMARKS
Sept. 24	10°N. 68°30'E. 300 miles West of Laccadives	1 PEREGRINE FALCON (<i>Falco peregrinus</i>)	Roosted on board overnight.
Sept. 29	18°N. 57°E. 50 miles East of Kuria Muria Is.,	1 BLUE-HEADED WAGTAIL (<i>Motacilla flava</i>)	On board.
Sept. 28/29	Gulf of Kutch	1 INDIAN ROLLER (<i>Coruceus benghalensis</i>) d.S. 14 GREEN BEE-EATERS (<i>Merops orientalis</i>) d.S.S.E. 2 BLACK REDSTARTS (<i>Phoenicurus ochruros</i>) d.S.	On board and around ship.
Oct. 2	18 06'N. 71 07'E. 100 miles West of Bombay	1 GREY WAGTAIL (<i>Motacilla cinerea</i>)	
Oct. 3	12°32'N. 74°10'E. Laccadive Is.	1 GREY WAGTAIL (<i>Motacilla cinerea</i>) d.S.E.	
Oct. 6	13°33'N. 82°05'E. W. Central, Bay of Bengal	1 SWALLOW (<i>Hirundo rustica</i>) d.N.N.E.	
Oct. 8	Hooghly River at Budge Budge	Many BENGAL VULTURES (<i>Gyps bengalensis</i>) BRAHMINY KITE (<i>Haliastur inolus</i>) Many BLACK KITES (<i>Milvus migrans</i>) CATTLE EGRETS (<i>Ardeola ibis</i>) HOUSE CROWS (<i>Corvus splendens</i>) Many COMMON MYNAS (<i>Acridotheres tristis</i>) 2 RED TURTLE DOVES Several CURLEWS (<i>Numenius arquata</i>)	Close around ship for 1 hour.

Oct.	11	16°32'N. 85°56'E. Central Bay of Bengal	1 PARADISE FLYCATCHER 1 SWALLOW (<i>Hirundo rustica</i>) d.N.E.	
Oct.	15	15°36'N. 73°30'E. Off Goa	2 GREY WAGTAILS (<i>Motacilla cinerea</i>)	
Oct.	19	15°18'N. 68°54'E. East Arabian Sea	1 YELLOW WAGTAIL (<i>Motacilla flava</i>)	On board for 3 days.
Oct.	21	6°20'N. 59°59'E. S. Central Arabian Sea	1 GREY WAGTAIL (<i>Motacilla cinerea</i>)	
Oct.	27	9°42'S. 45°19'E. North Mozambique Channel	1 WHIMBREL (<i>Numenius phaeopus</i>)	On board for 2 hours. Close detailed inspection.
Nov.	12	20°13'N. 59°24'E. Off Masira I.	1 STARLING (<i>Sturnus vulgaris</i>) 1 SWALLOW (<i>Hirundo rustica</i>)	
Nov.	20	27°N. 52°E.	1 NIGHTJAR (<i>Caprimulgus aegyptuis</i>)	On board.

SUMMARY OF RECORDS OF BIRDS AT SEA IN THE EASTERN NORTH ATLANTIC DURING THE ABNORMALLY SEVERE WINTER AND EARLY SPRING, 1962/63

Summarised by Captain G. S. Tuck, R.N., from reports and letters received

In the first quarter of 1963, in the words of the Meteorological Office "Arctic air flowed into Europe from the Russian side of the Arctic instead of towards Greenland and Baffin Bay. The atmospheric circulation over the North Atlantic and Arctic regions during the winter was therefore very abnormal. The area of Arctic pack ice east of Greenland was abnormally large, extending almost as far as northwest Iceland".

The cold weather experienced at home was also stretching all over the Northern Hemisphere. There was snow all along the continental Mediterranean; it was bitterly cold in Egypt; Japan was freezing. All through the Mediterranean freak air thermals were occurring, and gulls were caught up and soaring so high that they could only just be seen.

At the height of the intensely cold spell which covered the British Isles in January, 1963, accompanied by strong easterly winds, it was not surprising that many land birds were being reported far to the west and southwest of land. Very many must have perished.

On 7th January, 1963, Captain Harrison in s.s. Kent reported dozens of Blackbirds and Fieldfares 122 miles west of Pointe du Raz (near Brest).

Between 13th and 19th January, Chief Engineer Macinnes in s.s. Otina was at sea, hove to at times, in very heavy weather 60 miles or so west of Oporto, the wind being easterly, force 8. For two days about 20 Lapwings kept constant company with his ship and later were joined by numbers of Starlings. On 18th January a solitary Curlew appeared and was seen flying around the ship for two whole days together with the Lapwings which were present continuously on the last four days. None of these birds alighted. It seems probable that some of the same birds were present for several days, and, if so, it is interesting to reflect on the long period they were able to remain in flight without rest.

Further north in the North Atlantic three other members were at sea, Captain E.F. Aikmen in s.s. Beaverglen from Le Havre to St. John, New Brunswick, Chief Officer K. D. A. Lamb in s.s. Sylvania from Liverpool to New York, and Apprentice S. F. Chapman in s.s. Birmingham City from the British Isles to Canada.

On 14th January Aikman reported a Lapwing 250 miles west of Southern Ireland, and on his return journey on 5th February another Lapwing onboard 400 miles south-west of Ireland.

Meantime, on 12th January, Stephen Chapman was reporting 20 Starlings, 1 Song Thrush and 1 Blackbird onboard in 51°26'N. 15°W., and later on 14th January, 1 Fieldfare and 1 Common Snipe on deck in 50°30'N. 30°W. in mid Atlantic.

On 13th January s.s. Sylvania was making west at 25 knots, with a southeasterly gale blowing. When 300 miles west of Northern Ireland and 600 miles south of Iceland 3 Peregrine Falcons in company overtook the ship from astern. They remained close to the ship for $\frac{1}{2}$ hour, occasionally diving from about 500 feet to sea level, giving Lamb an excellent view of them.

The sea bird report sheets along the same routes gave evidence that

some of the generally accepted 'inshore' gulls had probably been driven far out to sea.

Stephen Chapman in s.s. Birmingham City was in mid North Atlantic, $50^{\circ}29'N$. $30^{\circ}37'W$. on 14th January, nearly 1,000 miles from the nearest land. He was somewhat surprised to see a Herring Gull perched on the foremast truck, and to identify two or three Common Gulls and one Northern Black-headed Gull following his ship. Later, on 16th January, in $40^{\circ}50'N$. $43^{\circ}56'W$. two adult Great Black-backed Gulls were following astern. This is nothing new however for these gulls have been observed frequently at sea throughout the entire North Atlantic crossing in this latitude.

Did the aftermath of the abnormally cold conditions in early spring in the sub Arctic zone of the eastern North Atlantic affect the general northward migration of sea birds to their northern breeding quarters?

Certainly the Belle Isle Strait was completely closed with ice on 21st May.

On 22nd May in $48^{\circ}52'N$. $43^{\circ}18'W$., Captain Aikinen remarked that, when Long-tailed Skuas are to be seen usually here abouts in ones and twos migrating northwards, he observed 30 or more light phase Long-tailed Skuas in a group flying aimlessly to and fro, and making no effort to make to the north.

Three days later, and further to the east in $50^{\circ}44'N$. $16^{\circ}15'W$., he observed a flock of about 70 terns (species unidentified) flying steadily south. He remarks that this was quite exceptional at this time of year in relation to previous sightings—and he should know, for he has been keeping a detailed bird log on the British Isles to Canada crossing covering one hundred and thirty one passages over a period of ten years!!

Incidentally, he remarked that this was his most easterly tern record apart from purely coastal sightings. Of thirteen previous records in April and May, eleven have occurred between 30° and $40^{\circ}W$.

SHORT NOTES

SOME OBSERVATIONS ON SEA BIRDS ON VOYAGES FROM THE BRITISH ISLES TO EASTERN CANADIAN PORTS

Contributed by Captain E. F. Aikman, S.S. Beaverglen, c/o Canadian Pacific Steamships Ltd., P.O. Box 21, Royal Liver Buildings, Liverpool.

(Note by Editor :— The observations are based on one hundred and thirty-one voyages between 1953 and 1963, detailed records being kept only outside coastal waters.)

SUMMARY OF VOYAGES

English Channel—South of Newfoundland	52 voyages
English Channel—Belle Isle Strait	58 voyages
N. of Ireland—South of Newfoundland	9 voyages
N. of Ireland—Belle Isle Strait	6 voyages
Belle Isle—Pentland Firth	2 voyages
C. Race—Pentland Firth	4 voyages

GENERAL.

On these routes it is rare, except in thick weather, to pass a day without seeing sea birds. During the ocean passage there are commonly one to two dozen birds following the ship, Fulmars predominating in summer and Kittiwakes in winter. Kittiwakes disappear from the ocean almost entirely from June to August, but the absence of Fulmars in winter is less complete. Both species are sometimes seen in considerable numbers in the approaches to Belle Isle in September and October.

The following table shows the number of days when Kittiwakes have *not* been seen in relation to the total number of days watched (Blank Kittiwake days/days watched).

- A. Within about 120 miles east of Belle Isle.
- B. Nova Scotia coast to eastern limits of Grand Banks.
- C. The Ocean.
- D. Within 100 fathom line west of English Channel.
- E. Within 120 miles west of the Butt of Lewis or Tory Isle.

	A.	B.	C.	D.	E.
April		8/20	25/51 (49%)	2/6	4/5
May		8/17	41/59 (70%)	5/10	1/5
June	4/5	4/8	50/50 (100%)	9/13	2/3
July	6/9		60/61 (98%)	6/10	1/4
August	5/11		45/53 (85%)	9/11	
September	1/8		36/48 (75%)	10/10	1/1
October	1/7		14/42 (33%)	3/5	

SHEARWATERS

The Strait of Belle Isle is in use from June/July to December and Great Shearwaters are often seen in large numbers from July to September, either in the Strait or just outside, also Sooty Shearwaters in small numbers. I also have records of many Great Shearwaters off Belle

Isle on two occasions in October (12th October, 1953 and 29th October, 1960). They are seen regularly in the ocean in October, usually in small numbers, but on 3rd October, 1955, many in 53°N. 41°W.

GULLS

Glaucous and Iceland Gulls are not always easy to distinguish from each other unless seen together or in company with Herring Gulls. I have 47 records of these and Kumliens, all September to April, nine in November, 17 in December, and the rest fairly evenly spread out.

SKUAS

Great Skuas have been recorded in all months except November (total 74)—77 per cent. in March, April, August and September. 67 per cent. of all records between 10° and 40°W., but in September five out of 15 records lay east of 10°W. The only other such eastern records are two in March and one each in April, May, June and August.

Pomarine Skuas (total 33)—82 per cent. in April and May, only six observations in all in June, July, August and September. 60 per cent between 20° and 40°W., only one observation east of 20°W.

Long-tailed Skuas (total 22)—observed only in April, May (68 per cent.), and August. Seventy-seven per cent. between 30° and 50°W., only two east of 30°W.

Arctic Skuas (total six) in April, May, August and September.

TERNS

Recorded in all months April to September (total 21), of which 13 occurred in April and May, and 11 between 30° and 40°W. No identifications as to species.

In all the above quotations of numbers, positive identifications only have been taken into account.

SOME OBSERVATIONS ON SEA BIRDS ON VOYAGES BETWEEN THE BRITISH ISLES AND NORFOLK VIRGINIA

*Contributed by Second Officer M. E. Jones, M.V. Overseas Courier,
T. and J. Brocklebank Ltd.*

(Note by Editor:— The observations are based on six round crossings of the North Atlantic between December, 1961 and June 1962 on routes somewhat different to those covered by Captain E. F. Aikman.)

I found the most interesting feature of the six round crossings to be the month to month change in the pattern of sea birds.

The first two round crossings made in December, 1961 and January, 1962 were taken along the direct rhumb line between the English Channel and Chesapeake Bay, and marked by frequent storms.

During these voyages Kittiwakes were by far the most noticeable birds. This does not mean to say that there were more Kittiwakes than would have been seen on more northerly routes, but rather to point out that very few Fulmers were seen. Single counts of Kittiwakes often reached between 300 and 400 birds with immature birds seldom greater than 20 per cent. Kittiwakes were usually absent west of 63°W., but mov-

ing westwards from 60°W. the American race of Herring Gull appeared in ever increasing numbers.

The third round crossings along the same route in late February and early March were marked by a notable reduction in the numbers of Kittiwakes, and the percentage of adults was seldom below 95 per cent.

The remaining three round crossings covered the more northerly route from the Pentland Firth by Great Circle to the Grand Banks, thence southward by a series of Rhumb Lines to Chesapeake Bay. The first of these in April, a transitional month, provided a different cross section of sea birds owing to the change of routes. The Grand Banks produced the usual large numbers of Little Auks, Guillemots and Fulmars, the latter replacing the position of dominance of the Kittiwakes in early crossings. However, on 19th April in 51°24'N. 35°41'W. I saw a remarkable concentration of upwards of 2,000 Kittiwakes, (95 per cent. immatures), within a four mile radius of the ship. A probable cause was the presence all day of shoals of small fish.

Earlier, on 13th April, in 37°42'N. 72°15'W. the first Wilson's Storm Petrels were seen, about 75 following the ship. The first appearance of other southern visitors was of two Sooty Shearwaters on 6th May, in 42°48'N. 52°56'W. Great Shearwaters were seen for the first time on 13th May, in 40°30'N. 56°33'W. These increased steadily. The greatest numbers recorded were "several thousand" on 1st June, in 46°32'N. 47°36'W. the eastern edge of the Newfoundland Banks.

An interesting point of note was that on more than one occasion in the western North Atlantic many of these Great Shearwaters would follow the vessel for periods of an hour or more. They tried to emulate the accompanying Fulmars, and though several showed little difficulty in following the Fulmars planing flight, others kept breaking off into their swinging banking flight falling astern. Nevertheless they persisted in following.

The last two crossings in May and June continued the general pattern of the April observations. The resident North Atlantic sea birds, apart for some non-breeding Fulmars and Kittiwakes, faded out of the picture giving way to large numbers of Wilson's Storm Petrels and Great Shearwaters. Sooty Shearwaters occurred only spasmodically in single numbers.

NORTHWARD PASSAGE OF GREAT SHEARWATERS IN THE NORTH ATLANTIC IN MAY, 1963

*Contributed by Second Officer R. S. Hawkins, M.V. Regent Falcon,
c/o B.P. Tanker Coy. Ltd., Britannic House, Finsbury Circus,
London, E.C.2.*

While on passage from Trinidad to the British Isles in May, 1963, the following observations of Great Shearwaters were made :—

12th May, 1963—0600 hrs L.M.T. In position 19°N. 55°W. roughly 400 miles east of the Leeward Islands:— Approximately 1 dozen in one flock flying due north.

13th May, 1963—0530 to 0800 hrs. L.M.T. In position 22°31'N. 51°45'W., roughly 700 miles northeast of the Leeward Islands:— approximately 400 in flocks of 25 to 30 birds flying rapidly due north. Their speed was estimated at 25 knots. At about 0700 hrs. the numbers decreased and only two stragglers passed close to the ship at dusk.

The birds' course line drawn back through the position of the

greatest concentration met the South American coast to the west of the mouth of the Amazon, which might support the view that the birds leave Tristan da Cunha flying westwards and then move north off the coast of South America. Extending the birds' course line northwards their flight speed, allowing a reasonable time for rest and feeding, could have enabled them to reach the Grand Banks within 36 hours.

As no other Great Shearwaters were seen during the rest of the passage, even north of the Azores, this tends to confirm the generally accepted pattern of their northward dispersion.

SEA BIRDS AT THE CONFLUENCE OF THE GULF STREAM AND LABRADOR CURRENT EAST OF NEW YORK

*Contributed by Chief Officer K. D. A. Lamb, S.S. Mauretania, Cunard
S.S. Coy. Ltd., Cunard Building, Liverpool 3.*

When on passage from Cobh to New York, and in position approximately 41°N. 66°30'W. at 6.22 p.m. on Monday, 6th May, 1963, about 340 miles east of New York, s.s. Sylvania passed through the confluence of the Gulf Stream and colder water brought south by the Labrador Current.

The line of demarcation between the warm and cold waters was clearly defined by rough water and the appearance of sea smoke over the colder waters. At the same time quantities of marine life had been forced to the surface attracting a remarkable profusion of bird life in all stages of maturity.

Gulls were well represented by Kittiwakes, Ring-billed Gulls and many Herring Gulls and Great Black-backed Gulls, so surfeited that they had difficulty in avoiding the ship as it approached.

Northern Gannets, both adults and immature, dived into the water to feed on the harvest that was so abundant. Other Gannets steered themselves forward with half folded wings, closing them just before entering the water, to reappear a few seconds later to repeat the search.

Wilson's, and I think Leach's Storm-Petrels also, pattered and flitted on the surface in their dozens, intent on securing their share of food.

Guillemots (*Uria aalge*) swam in the broken water, bobbing below the surface to take part in what appeared to be an easy search for fish.

Terns were flocking and wheeling in white clouds, but whether Arctic Terns or Common Terns it was hard to distinguish in the milling throng of moving birds.

Some Long-tailed Skuas were observed on the fringe of the melee, flying higher and slower than the main concentration.

To add to this spectacle great flocks of Grey Phalaropes (*Phalaropus fulicarius*), each consisting of hundreds of birds, were seen wheeling to and fro across the feeding areas, doubtless en route to their breeding grounds on the Great Lakes of America and Canada. Possibly the ship was crossing their migration route.

During the ensuing half hour the air temperature fell from 52° to 44°F. and the sea water from 71° to 42°F. The sea smoke intensified from what was at first vapour rising from the surface of the cold water in small wisps to a wall of fog 150 feet high, reducing visibility to port and abaft the beam to nil, Ahead and to starboard the weather was perfectly clear with a cloudless blue sky and brilliant sunshine. In all a most interesting ornithological and meteorological phenomenon.

A BIRD LIST FROM THE MAIN ISLAND OF ST. KILDA DURING AUGUST, 1963

Contributed by Commander David Thomas-Ferrand, R.N., Holcombe Lodge, Bathampton, Somerset

(Note by Editor :— Commander Thomas-Ferrand visited St. Kilda with a naval surveying party from 1st to 10th August, 1963.)

We went in an L.C.T. from Helensborough, calling at Benbecula in the Outer Hebrides en route. St. Kilda is inhabited now only by some Army personnel, but the ruins of the old houses, without roofs, still remain from the days of the old settlers who left in 1930.

We explored all the main island of Hirta and listed the following birds:—

Ravens (particularly in Ruaival)
Hooded Crows
Black Guillemots in the sea off Dun Island
Great Skuas (nesting in Glenmor)
Puffins everywhere
British Storm-Petrel (nesting in a stone cleit on Oiseval)
Leach's Storm-Petrel (nesting on Carnmor)
Fulmar Petrels (nesting on Mullack Bi, Gun Ruaival, and all high cliffs)
Gannets in vast number on Boreray
Kittiwakes (nesting on all steep ledges)
Herring Gulls (we found one nest still with eggs)
Greater and Lesser Black-backed Gulls
Common Gull (not seen, but warden said it nested this year)
White Wagtails
Swifts
Meadow Pipits
Rock Pipits (very common)
Tree Sparrows (but no House Sparrows)
Wheatears (very numerous)
Turnstones (15 on rocks in Village Bay)
Dunlins and Sanderlings
Whimbrels
Eider Ducks
Scoter
St. Kilda Wren (particularly in old houses)
Starlings
Crossbills (two male and three female above Village Bay)
Twites (near rubbish dump in Village Bay)
Manx Shearwaters (not seen, but reported nesting on Carnmor)
Shags (but no Cormorants)
Snipe (numerous in bracken and flag beds)
Oyster Catchers (very common)
Peregrines (have nested on Oiseval, but not seen this year)
Guillemots and Razorbills (seen on passage, but not on St. Kilda)
Golden Plover (ten on Mulloch Sgar)
Ringed Plover (two in Village Bay)

Curlew (one on Ruaival)
Reeve (one on Airidh Mhor)
Corn Bunting (Oiseval)
Black-headed Gull (three immature)

There are no trees on Hirta, but rich pasture in places and dwarf heather. White heather was growing on Oiseval. There are still many Soay sheep on the island, with a preponderance of rams in Village Bay. No cliff is too steep for them. All the caves are full of Grey Seals. One old bull lies on the rocks in Village Bay and is so tame that you can walk up and touch him. We also saw Basking Sharks and the St. Kilda mouse.

The last Great Auk was seen on Stac an Armin off Boreray in 1820, although there are also reports of one having been killed on Soay in 1840. I am told that the cragsmen thought that this bird was a witch.

STORM PETRELS IN THE ARABIAN SEA

Contributed by Second Officer M. E. Jones, M.V. Overseas Courier, T. and J. Brocklebank Ltd.

WHITE-BELLIED STORM PETREL (*Fregatta grallaria*).

In the 1960 *Sea Swallow* there is a comment on the, as yet, irregular records of the White-bellied and Black-bellied Storm Petrels in the Arabian Sea.

I have a note of seeing the former species on several summer crossings of this area in 1955 and 1956, but at that time I was not making full notes as in the R.N.B.W.S. system.

In July, 1958, en route from Aden to Visagapatam I have the following entry for 18th July:—Noon position 10°40'N. 63°33'E. sea calm. One Storm Petrel, upperparts black including wings and tail, rump and belly white. This bird remained about the bow wave for five minutes. During the afternoon two similar Storm Petrels ranged abeam for 15 minutes, often coming to within 75 yards. Their flight was reminiscent of larger petrels with a lilting action from one wing to the other.

No Wilson's Storm Petrels were present.

In late July, 1960, I recorded a similar description of four birds seen in approximately the same position.

WILSON'S STORM PETREL (*Oceanites oceanicus*).

Captain P. P. O. Harrison's account of a great flock of these petrels 100 miles east of Aden on 28th July, 1961, prompts me to add this note:—29th September, 1958, on passage from East Pakistan to Aden, in position 12°53'N. 50°36'E. The ship was steaming at 11½ knots and at 11.40 entered the greatest concentration of sea birds I have ever seen in my life. All were Wilson's Storm Petrels, the sea was thick with birds far out to the horizon, both settled on the sea and flying in groups of a few birds to flocks of well over a thousand. For three-quarters of an hour the ship passed through this astonishing scene. At the same time vast numbers of Red-necked Phalaropes were present. Perhaps this was a focal point for the Phalaropes recently arrived from the north and the Wilson's Storm Petrels massing before starting their return journey to the south.

Captain Harrison's same note also refers to Wilson's Storm Petrels feeding on dead locusts. I have a note of a passage from Aden to Calcutta in July, 1957, in which 400 to 500 of these birds were seen feeding, or appearing to feed, on dead locusts strewn on the flat calm sea by a sand storm many hours earlier

THE BIRDS OF SOME ISLANDS IN THE INDIAN OCEAN

By LIEUTENANT COMMANDER R. O. MORRIS, R.N.

[*Comment.*—The islands of the Indian Ocean have been isolated from all other land masses for a very long period, and have become populated with endemic populations of animals and birds which show some remarkable adaptations to their peculiar isolated environment. The strangest of these used to be the huge flightless Dodos of the Mascarene Islands, exterminated by hogs soon after they were discovered, and long forgotten until their bones were dug up again by Edward Newton (brother of the ornithologist-professor of zoology at Cambridge, Alfred Newton) a century ago. The islands attracted great attention at that time, but received little further study in the first half of this century. They have recently entered the news again as an increasing number of ornithological expeditions have visited them, and are now receiving intensive study again during the course of the International Indian Ocean Expedition. The United States National Museum (the Smithsonian Institution) has produced a useful illustrated field-guide to the birds of the islands (obtainable from the Institution at Washington 25, D.C.), and now that some preliminary doubts concerning the extent to which it was proposed to collect rare birds have been set at rest (and some errors in the accounts of seabirds corrected) we are glad to be able to recommend the guide to anyone interested in the area, and suggest that they should consider cooperating freely with the workers at the Institution.

At the time when this guide went to press, as it happens, one of our members had already sent us some notes on some of the Indian Ocean Islands which prove to contain new observations as well as providing an excellent illustration of the way in which members can make the best use of their opportunities for observation when visiting little-known islands, and we give them here both for their value as original contributions to knowledge, and as demonstrations of the way in which this type of work can be approached. (I have added the comments in brackets.) W. R. P. BOURNE.]

SOME NOTES ON THE BIRDS OF ALDABRA

Aldabra is the largest of a scattered group of atolls about 200 miles north west of the northern tip of Madagascar. It is a coralline atoll, roughly 20 miles long by seven miles broad. The central lagoon is surrounded by an almost continuous ring of islands, in places as much as

two miles broad, but not more than 15 to 20 feet above sea level except for a few sand hills on the south coast which rise to about 40 feet. Most of the land is covered by dense scrub and low jungle, and the lagoon is fringed for most of its shoreline with mangrove swamps. The lagoon itself is very shallow, and large expanses of it dry out at low water, as does a coral reef fringing the outer shores of the islands.

A part from U.M.S. Owen spent three days ashore on Aldabra, in the latter part of January 1962, and the ship returned at the end of February for a flying visit of only 12 hours. Although we were primarily occupied with surveying work, we managed to collect a certain amount of ornithological information, which is embodied in these notes.

The lack of any bird books covering the area on board made identification of the species of the birds seen difficult, and in several cases impossible. I have therefore appended a series of field descriptions, mostly built up from several sightings over the two visits, listing and describing each bird under the name that it is referred to by in these notes.

Off the island as the ship approached we saw boobies, frigate birds and noddies, with some large black-capped terns with bright orange-yellow bills, tentatively identified as Lesser Crested Terns.

On a boat trip along the seaward coast of West Island near low tide all three types of heron, the Grey, Black, and White Egret, were observed. Both of the latter were plentiful, the white seeming slightly to predominate, and both moved about constantly, seldom standing upright but searching for food with neck recurved and body held almost horizontal. In contrast, the few Grey Herons stood motionless for long periods, usually rather apart from their smaller cousins. Among the throng were several Crab-Plovers and a few small brown waders, too far away for identification, though I think that they were Scolopacidae rather than plovers. Overhead circled a few frigate birds, and lower a small number of terns and boobies, the latter mainly Red-footed, though one or two could possibly have been Blue-faced. Flying purposefully out from the land (between 10 and 11 a.m.) were a number of noddies, almost certainly Common Noddies.

Entering the lagoon by the main channel, between West and Polymnic Islands, we were at once struck by the large number of Frigate birds circling over the drying reefs inside the lagoon, plunging to take the fish which splashed on the surface, trapped by the falling tide in pools in the coral.

One noticeable distinction about the bird life of the lagoon as contrasted with the sea shore was the complete reversal of the proportions of the species of herons. Hardly any White and very few Black Herons appeared within the ring of islands, but there were considerably more Grey Herons. Although they were still always either solitary or in pairs, and nowhere plentiful, there were appreciably more of them than of both the other forms put together.

Our base camp was situated just inside the main channel into the lagoon, on West Ireland, and after setting it up we could take note of our neighbours. On a small rocky islet about 40 feet square, covered in scrub, lived a pair of White-tailed Tropic-birds. Groups of three or four Orange-billed Bulbuls came to investigate us, flying rather clumsily from tree to tree one after the other, making a great deal of noise. They had a wide repertoire of calls, some melodious but many harshly cackling. Hard

on their heels came families of sunbirds, the male very colourful, usually accompanied by one or two dull brown hens or youngsters.

In the bush round the camp we found three other species. The first was an unmistakable White-eye. Groups of about 10 of them moved purposefully through the trees, here a mixture of casuarinas and lower broad-leaved shrubs, working them over thoroughly in a search for insects. As they moved the group kept up an almost continuous low twittering. Individual birds sometimes called with a low, rather bell-like "tee-cep" repeated a varying number of times up to about six.

A few Drongos, singly for the most part, but occasionally in pairs, sat near the tops of trees. From time to time one would drop off with a curious fall and twist, rather like an acrobatic high dive, for a short flight before returning, sometimes to the same or sometimes to a different perch.

Much more spectacular was a brilliant red, yellow and brown bird which at first I classed as a weaver, but having in Mauritius and in the Seychelles seen its relative the Madagascar Fody I now know to have been an Aldabran Fody. On West Island they were quite common near the water, and there I also saw a few of the nondescript olive and yellow hens. On one occasion a pair indulged in a long but apparently quite friendly chase, taking shortish flights from branch to branch and tree to tree. They did not show the Madagascar Fody's dislike for short hops, either when by themselves or in pairs. Several cocks were seen on the lagoon edge of the mangrove swamps of South Island, but I saw no hens there.

On the western end of Polymnie Island I saw a group of three birds identical in shape and size to the normal black drongos, but coloured a rather uneven brown, darker on the head and wings, palest on the flanks, possibly young birds. Sunbirds and Fodies were also fairly abundant in the thickets on Polymnie, although the Fodies never came out into the more open casuarina grove along the northern shore.

A day spent on the north (lagoon) shore of South Island was very interesting. The mangrove along most of this shore is bordered at low water with a wide strip of fairly firm mud, and is the haunt of numerous waders. One solitary Black Heron was the first to appear as the tide began to fall, closely followed by three Crab-Plovers. Later two species of small plover were seen; two Grey Plovers, or possibly the same bird seen twice, unmistakable with its black axillaries, and some smaller plovers with broad, palish chest bands, possibly Great Sand-Plovers, in a group of three, with two separate ones seen later. Lastly there were a group of five Dunlin methodically quartering the flat, puttering with their curved bills in the thin sludge on the upper surface of the mud. A return to the same spot during our second visit in February added a solitary Curlew and one each of the other two species of Heron to the list.

In a mangrove tree, about five feet above the ground and inside the outer layer of leaves, was a sunbird's nest, a coarsely woven ball of grass and thin twigs lined with white feathers, about $4\frac{1}{2}$ inches in diameter hung under a thin branch. It had a small (about $1\frac{1}{4}$ inches diameter) hole in the front, the side away from the trunk of the tree. In it were two tiny eggs, dirty white lightly mottled with umber. During the eight hours or so that we were in the vicinity, only the hen was seen to visit the nest. She spent most of the time in it, and returned within 10 to 15 minutes when an incautious approach (of which there were several) drove her

off her eggs. When we returned in February only the tattered ruins of the nest remained.

To the east of the promontory on which we spent most of our time at this side of the lagoon we saw a colony of Red-footed Boobies, some 40 adults close together in the trees at the edge of the mudflat, with some more and several of the golden brown immatures flying overhead. Unfortunately the state of the tide and the time available did not allow us to approach close enough to see whether they were actually breeding.

Over the lagoon two species of tern were common, the little Black-naped Tern and the larger yellow-billed variety already referred to as Lesser Crested Terns. Near and over Euphrates Island were about 20 White Terns, pure, almost transparently white, with black eye and bill, wheeling, screeching their loud, almost parrot-like cackle over the trees at the eastern end of the island. There were also two solitary Grey Herons on the island, and a few Fodics.

On our first visit the trees at the western end of Polymnic Island became black with Frigate Birds in the evening at about sunset, but on our second, in late February, there were very few in evidence, either during the day or in the evening, although on leaving the group for the last time at sunset on February 28th, we passed many Red-footed Boobies making for the islands.

SPECIFIC LIST WITH DESCRIPTIONS

NOTES

1. The descriptions have been made solely from field notes, and even where the identification of the species is considered certain no attempt has been made to add features not noticed in the field, or to modify points of disagreement with standard descriptions.

2. Where the English name is given in capital letters, with the scientific name, the identification is thought to be probably correct. Where the English name is given in small letters with the scientific name the identification is tentative only. Where only an English name in small letters is given it is a name given for easy reference, and the real identity of the bird is not known, though it is hoped that it has at least been placed in the right family.

WHITE-TAILED TROPIC BIRD (*Phaethon lepturus*)

A white bird with black markings on the wings and a black streak through the eye. Central tail feathers greatly elongated and narrow. Bill yellow-orange to vermillion.

RED-FOOTED BOOBY (*Sula sula*)

An all-white bird with black primaries. Feet bright orange-red. Bill pale straw-coloured, bare skin of face palish clayey grey. Some (immature ?) birds were a dirty golden brown, darker on the wings, with a whitish tail and rump.

BLUE-FACED BOOBY (*Sula dactylatra*)

A white bird, slightly larger than the Red-footed Boobies, with black primaries and some secondaries, and a black band at the tip of the tail. Bill pale straw-coloured, bareface grey, rather darker than the Red-footed Boobies.

GREAT FRIGATE-BIRD (*Fregata minor*)

Male—Black all over, with a bright red gular pouch. Female—Black, with white belly, breast and lower neck merging into pale grey throat and chin.

LESSER FRIGATE-BIRD (*Fregata ariel*)

Male—Black, with a white patch on each side under the wing. Red gular pouch. Female—Black, with white breast and sides of belly. Both sexes noticeably smaller than the Great Frigate-birds.

GREY HERON (*Ardea cinerea*)

Head, neck and underparts white, with a black cap and a black streak down each side of the neck continuing down the flanks under the wings. Back and wings blue-grey, darker, almost to black towards the wingtips. Bill yellow to yellowish orange, legs yellowish to dark yellow-brown. These birds seemed rather larger than English Grey Herons.

White Heron

An all-white heron, about two thirds the size of an English Grey Heron, with a black bill and black legs with yellow feet. (Apparently the white phase of the Dimorphic Egret, *Egretta dimorpha* .

Black Heron

Black, glossed on the back with dark blue. Forehead and crown whitish, mottled with dark grey and black, becoming darker towards the back of the head and merging into the black of the chin and neck. Clear-cut white patches on shoulders. Bill black at tip becoming whitish yellow close to the head, and with a considerable area of yellow under the inner end. Legs black, feet whitish yellow. (Apparently the dark phase of *Egretta dimorpha*.)

GREY PLOVER (*Charadrius squatarola*)

A rather nondescript brownish plover, paler underneath. Under wings whitish, with black axillaries conspicuous in flight. (New for Aldabra.)

Great Sand-Plover (*Charadrius leschenaulti*)

Sandy umber above, with a broad band of the same colour across the breast, a white patch on the forehead and a black eye-streak. Bill thickish, black. In flight showed a white bar from the inner end of the primaries to the body. Rather smaller than the Grey Plovers, but not as small as normal Ringed Plovers. (Identification seems correct. New for Aldabra.)

Dunlin (*Calidris alpina*,

Sandy brown above, whitish below. The beginnings of a pale sandy collar was visible on the breast, but it did not join in front. A pale streak over the eye. Bill slightly down-curved. About the same size as the Great Sand-Plovers. (Would be new, but description seems more like Curlew Sandpiper (*Erolia testacea*) which is not new).

CRAB-PLOVER (*Dromas ardeola*

A white, rather stocky wader with a black band on its wings and a heavy black bill. The Crab-Plovers on Aldabra seemed taller and slimmer than those I saw round Lamu in Kenya.

Lesser Crested Tern (*Sterna bengalensis*)

The largest terns on Aldabra. Cap and nape black, with a white forehead on most birds, though a few had the forehead as well black. The mantle and wings were pale grey, darker on the first and possibly the second primary. White below, with a well-forked tail. Bill bright orange-yellow. (Crested Tern (*Thalasseus bergii*) seems more likely.)

BLACK-NAPED TERN (*Sterna sumatrana*)

Very much smaller than the Lesser Crested Terns, little if at all larger than the White Terns. White, with very pale grey mantle and wings. First primary darker, sometimes almost sooty. A black streak from each eye back to meet on the nape. Eye and bill black. Tail forked, with the outer tail feathers elongated on some birds.

WHITE TERN (*Gygis alba*)

Brilliant "persil" white, with a black bill and big black eyes. Tail forked.

Common Noddy (*Anous stolidus*)

Dark sooty grey with a touch of lavender about it, with a white cap clearly cut off from the grey along the sides of the face but fading into the grey at the nape. Bill black or dark grey. (Identification seems correct.)

Drongo

A rather brownish black bird with a long tail the ends of which curve outwards in a rather fish-tail like fork. The same size or very slightly smaller than the Kenyan Drongo (*Dicrurus adsimilis*) which it closely resembles except for the browner shade of black plumage.

Some exactly similarly shaped birds with rather patchy dark straw-brown plumage are assumed to be young of the same species. Aldabran

Drongo (*Dicrurus aldabranus*).

Orange-billed Bulbul

Similar in size and shape to the Yellow-Vented Bulbul (*Pycnonotus goiavier*) of Malaya, but rather slimmer. Darkish sepia brown all over, rather paler below. Top of head, including a short crest, very dark brown, almost black. Bill and gape bright orange red. (Black Bulbul (*Hypsipetes madagascariensis*)).

White-bellied White-eye (*Zosterops madaraspatana*)

Typical chubby white-eye shape, olive green above, chin and upper breast lemon yellow, belly white, vent yellow. Bill and streak from bill to eye black, narrow white eye-ring. (White-bellied White-eye).

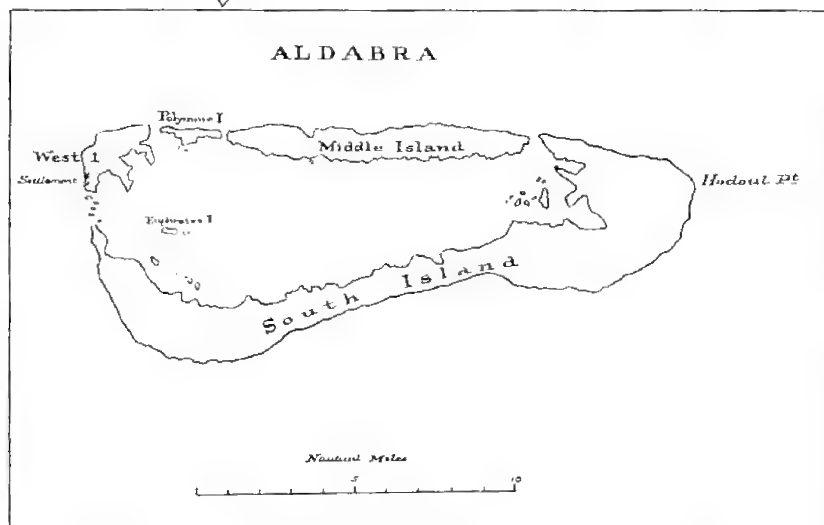
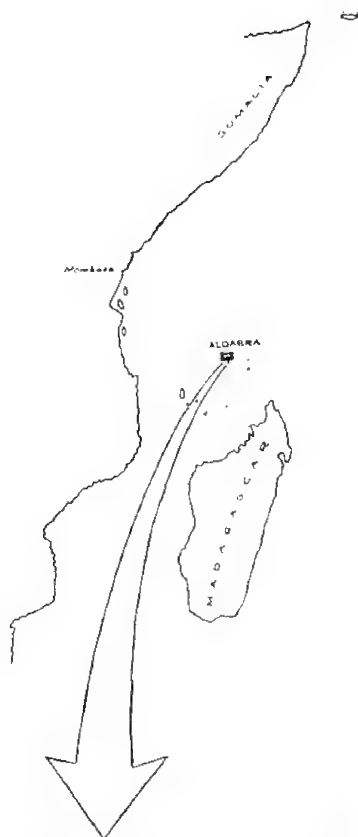
Blue-headed Sunbird

Male—Head, neck all round, and upper throat brilliant metallic sky blue, breast rich metallic scarlet, divided from white belly by an indistinct dark line. Wings and back brown, tail dark, possibly black, square and shortish. Bill long, down-curved, dark. *Female*—Dull mouse brown above, white below with a brown breast.

Young have an orange-yellow gape with yellow showing at sides of mouth when closed, otherwise indistinguishable from females. Male, female and fledged young are similar in size, slightly smaller and definitely slimmer in shape than the Amethyst Sunbird (*Chalcomitra amethystina*) of Kenya. (Souimanga Sunbird (*Nectarinia souimanga*)).

ALDABRAN FODY (*Foudia Aldabrana*).

Head, neck all round and rump bright red, rather more vermilion-orange and less crimson-scarlet than the Madagascar Fody. Wings and back mouse brown, the wings streaked with darker (possibly darker webs or shafts to flight feathers). Belly clear yellow. Beak black, with a streak of black from bill to eye. On later acquaintance with the Madagascar Fody in Mauritius and the Seychelles, my impression is that the Aldabran Fody is rather larger and definitely plumper than the former.



The female is similar in shape and size to the male, but is a palish olive green, much streaked with sooty grey above, and clearer and yellower below, with a paler bill and no black streak from bill to eye.

[*Comment.*—The birds of Aldabra have previously been covered in a number of papers, mostly summarised in the Smithsonian "Guide," except that the authors appear to have overlooked the most important study of the seabirds of the Seychelles area, "The exploitation of seabirds in Seychelles," by W. M. Ridley and R. M. Percy (Colonial Research Studies No. 25, London, 1958) which should be of interest to anyone interested in tropical seabirds or the rational exploitation of wildlife.—W. R. P. BOURNE.]

TROMELIN ISLAND

REPORT OF A SHORT VISIT BY H.M.S. OWEN, 23RD FEBRUARY, 1962

Tromelin lies 300 miles north west of Mauritius, 240 miles off the coast of Madagascar. It is about 1 mile long by $\frac{3}{4}$ mile broad, with its longer axis in a north west—south east direction. It is about 15 feet high, and rises abruptly from depths of 2,500 fathoms. A meteorological station, manned by 5 men, is situated on the northern tip of the island, and an aeroplane visits them every 2 months.

Our first birds seen since Mauritius were a group of Frigate Birds sighted about an hour after noon, 42 miles south of Tromelin. There were 10 to 15 of them, circling fairly high up, too far from the ship to determine the species. At 26 miles away another group of five Frigate birds came rather closer to the ship, and two of them were positively identified as a male and female Lesser Frigate Bird (*Fregata ariel*). At the same time a booby was seen, with black primaries and secondaries, and a thin black band at the tip of its tail, which was at the time identified as a Blue-faced Booby (*Sula dactylatra*).

From 20 miles south of the island Frigate Birds and Red-footed Boobies (*Sula sula*) were plentiful, both the white mature boobies, mostly with pale cream-coloured heads, and the golden brown immatures. Also fairly common were very dark boobies, with dark brown heads, backs and tails, white underparts including the underneath of the wings except for a thin band of black or dark brown around the edges, a thin white collar round the hind-neck, and some pale mottling on the upper wing-coverts. These were probably immature Red-footed boobies, but do not seem to agree with the description in Alexander.

Only half an hour was available ashore, so we were unable to visit the breeding grounds at the south end of the island. Between 200 and 500 Frigate Birds were circling over the island, two-thirds of them being Lessers, and about one-third Greater Frigate Birds (*Fregata Minor*) noticeably larger and browner than the Lessers. Towards evening large numbers of them congregated over the beach, where they wheeled and swooped down, feeding on the baby turtles who emerge from the sand at the top of the beach where they have just hatched out to crawl down to the sea. Between 150 and 300 Boobies, mostly adult red-footeds, but

with a fair sprinkling of golden brown immature red-footed and some of the dark birds referred to above were also present, mostly sitting on the ground. A smaller number of the Frigate birds were perched in the low bushes above the beach at the south end of the island. The met. men state that both species of Frigate bird and the Boobies breed all the year round.

A few terns with light grey mantles and black crowns and napes were seen off the beach, but did not approach close enough for a guess to be made at their species.

[*Comment.*—There is only one previous publication on the birds of Tromelin, "Observations sur les oiseaux de Tromelin," by E. Brygoo in *Naturaliste Malgache* 7(2):209-214, 1955. The island was badly infested with rats until the meteorological station was established in 1954 and they were killed, and in consequence there are no breeding small birds. In 1954 there were some 200 pairs of Red-footed Boobies, about a third in the dark phase (described above), ninety pairs of Blue-faced Boobies, and a hundred pairs of frigate-birds (species not distinguished) found breeding, and three other birds of doubtful identity were noticed, two of them waders, and the other flying over at dusk. Flamingoes were also said to have occurred. The Red-footed Boobies and Frigate-birds all had single eggs or chicks; the Blue-footed Boobies had two eggs in 18 out of 19 nests, but two young in only one out of 31 nests, while in other cases the second young bird had died. It was noticed both parents were never present at the nest with Red-footed Boobies, but both were often present with Blue-faced Boobies.—W. R. P. BOURNE.]

THE BIRDS OF ADDU ATOLL, MALDIVE ISLANDS

Addu is the most southerly of the chain of atolls which make up the Maldiv Islands. It lies 600 miles south west of the southern end of Ceylon, and is separated by the 50 miles wide Equatorial Channel from the nearest atoll to the north. The atoll is roughly circular, and encloses a deep water lagoon 6 miles wide.

During an eight-day visit in early February 1962, it was only possible to land on some of the islands along the western side of the lagoon. Little time was available for ornithological work, and only birds of the lagoon and shore were noted.

Over the lagoon by far the most common bird was the Black-Naped Tern (*Sterna sumatrana*), a little pale tern, white below and pale grey above, with a black streak from its eyes to the nape of the neck, and a forked tail. It had a black bill, and those seen on land had reddish black legs. They flew with very fast, regular wing-beats, and appeared able to hover for short periods. Also numerous on the lagoon were Common Noddies (*Anous stolidus*). On every buoy, beacon or pole sticking up out of the water there seemed to be at least one perched. Many of them appeared a browner shade of grey than the usual rather lavender grey of the adult Common Noddy, and may well have been immatures.

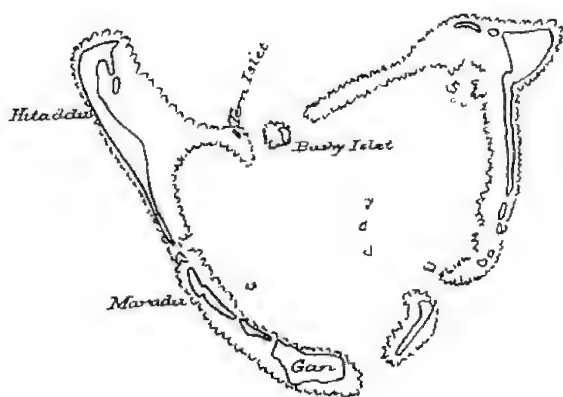
In the palm trees on the island of Maradu, and over the lagoon near the island were about 30-40 White Terns (*Gygis alba*). It was not possible to investigate closely to determine whether they were breeding, although this is considered likely.

Along the lagoon shore of Hitaddu were two or three Grey Herons (*Ardea cinerea*), identical in appearance to English Grey Herons, and several smaller bittern-like birds [probably Little Green Herons (*Butorides stratus*)]. These were half to two-thirds the height of the Grey Herons, tawny buff heavily streaked with black or dark brown, and with a dark cap and dark primaries. They were paler below, and had dark beaks and bright orange legs. At low tide they could be seen singly and in pairs searching for food on the weed-covered sandbanks fringing the shore. Also along the shores of Hitaddu were a few Curlew (*Numenius arquata*) and two sandpipers, almost certainly Common Sandpipers (*Tringa hypoleuca*).

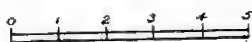
On Bushy Islet, a small scrub-covered islet with a few palm trees and some fairly extensive flats of corally shingle, about 30 to 40 Black-Naped Terns stood, rising and dive-bombing us as we walked about, though we found no nests. A large number of Noddies were standing on a low shingle bank on the reef close west of the islet. As we approached Bushy Islet for the first time we saw, for the only time anywhere in Addu, a small snipe-like bird, which got up and flew off as we came closer. It had a short bill for a snipe, scarcely longer than a plover's, and was a dark sepia brown with a hint of purple above, with a white or pale yellow wing bar and a similarly coloured bar dividing the wing from the body. It had a short tail and shortish legs, and may have had a pale streak over its eye.

On another tiny coral shingle islet on the reef east of Hitaddu (marked on the sketch map as Tern Islet) we found a breeding colony of Black-Naped Terns. The islet was only about 50 feet long by 20 feet broad, and we searched it carefully to make sure of the number of nests.

A D D U A T O L L



Nautical Miles



There were eleven, 8 with two eggs and 3 with only one. The eggs were a very pale blue-green, mottled irregularly with sepia. The degree of mottling varied from egg to egg, from a very slight to so heavy that the pattern appeared almost as a series of green lines on a sepia egg. The nests were no more than slight scrapes in the shingle, and would not have been noticed if it had not been for the eggs. A single grey heron and one of the bitterns referred to above were also seen on the islet, but they made off on our approach. The terns were much less wary, and wheeled and dived over us throughout our time on the islet. When we had both retreated to one end of the islet a few bold birds even returned to settle on the other end.

THE BIRDS OF THE GILBERT ISLANDS

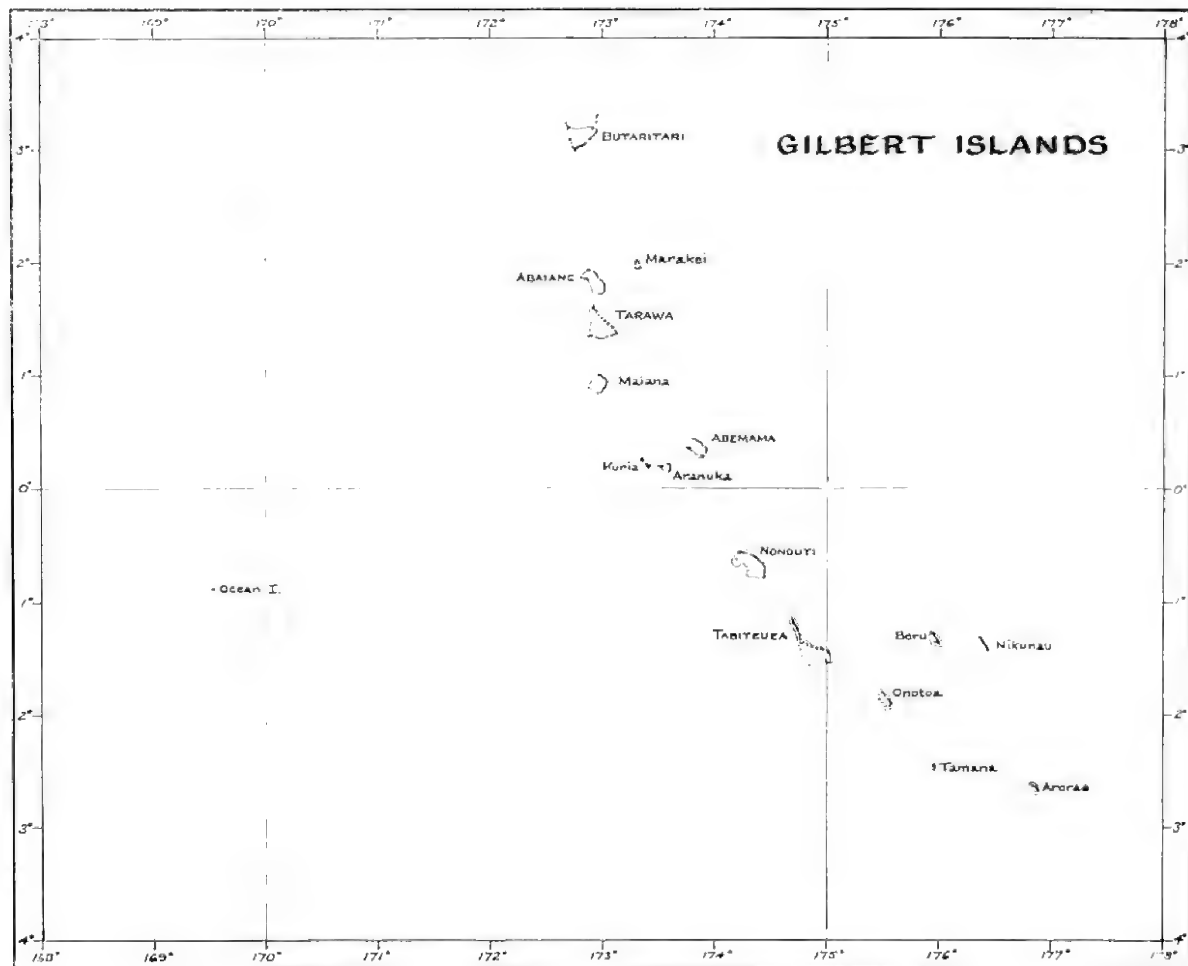
BY LIEUTENANT COMMANDER R. O. MORRIS, R.N.

THE FOLLOWING NOTE COVERS OBSERVATIONS MADE DURING TWO VISITS TO THE GILBERT ISLANDS BY H.M.S. COOK, FROM 26TH NOVEMBER TO 11TH DECEMBER, 1962, AND FROM 11TH JULY TO 20TH AUGUST, 1963.

In spite of the area over which they are spread, the islands are remarkably similar. Only Ocean Island, a rocky speck 250 miles west of the remainder, rises more than a few feet above sea level. All the rest consist of a crescent of low, sandy islets, seldom more than a hundred yards broad, on the eastern or windward side of an expanse of shallow water studded with reefs and coral heads. Low scrub and coconut palms clothe the islands to within a few feet of the high water line. The inhabitants live in small scattered villages strung along the western lagoon side of the islets. I had few opportunities of landing myself, but two of our members spent a considerable part of the second period ashore, Lieutenant P. G. Odling-Smee on Tabiteuea and Leading Seaman V. Knell on Nonouti.

Throughout the group the most common birds by far were the noddies. Large flocks were seen usually near the reefs but sometimes as far as 50 miles from land. They consisted mainly of White-capped Noddies (*Anous minutus*), but usually had a sprinkling of Common Noddies (*Anous stolidus*) amongst them, distinguishable by their larger size, browner colouring and less clearly defined and duller white cap. In August, off Tabiteuea and Nonouti, very large flocks, upwards of 1,000 birds in some, were seen over shoals of fish. When small fish, put up by tunny or barracuda, rise thickly, the noddies pack closely just above the water, the whole black mass pattering and dipping almost like storm petrels. Between these tight packs the birds disperse somewhat, occasionally moving as a tight nucleus with outriders in an almost military formation. When large flocks were not in evidence numbers of single noddies were almost always visible, quartering the sea low over the surface. Both species of Noddy were seen on posts and rocks on the reefs at Tarawa on 12th July. On Nonouti, White-capped Noddies were found nesting in coconut palms. Local information states that the two species of noddy can be distinguished by the fact that the Common Noddy (here called the Brown Noddy) nests in the heart of the palm head while the White-capped Noddy (here called the Black Noddy) nests further out along the fronds. No Common Noddies were seen nesting, so the truth of this assertion cannot be vouched for.

Two visits were made by Leading Seaman Knell to Numatong, an isolated, uninhabited islet at the north west corner of Nonouti, on 7th and



17th August. White-capped Noddies were breeding here in large numbers. On both occasions the nests, pads of small sticks plastered together with mud and droppings set on branches in the scrub, contained eggs, always one to each nest. The eggs were bluish white speckled with reddish sepia.

When within about 10 miles of land or reef we could be practically certain of seeing a few White Terns (*Gygis alba*), usually singly, sometimes in twos or threes, but never in large groups. They normally flew about 20 to 50 feet up, seldom if ever as low as the noddies. They were also seen ashore on Tabiteuea, Nonouti and Tarawa, usually flying around singly or in pairs, giving the call from which they derive their native name of Kia-kias.

Spectacled Terns (*Sterna lunata*), known locally and perhaps more appropriately as Grey-backed Terns, were usually present in small numbers over the lagoons at Tabiteuea and Nonouti, but apart from two sightings in December off the northern end of Nonouti were never seen outside the reefs. They are greyer above than Sooty Terns (*S. fuscata*), and have less black on the forehead than either Sooty or Brown-winged Terns (*S. anathæetus*).

On Nonouti Black-naped Terns (*Sterna sumatrana*) were as common, if not more plentiful than the White Terns. They were only seen elsewhere on two occasions, two standing on mooring posts in the lagoon at Tarawa on 12th July, and one flying seaward at about 30 feet, 3 miles north of Aranuka on 15th July. The second of these two passed very close to the ship, and its black streak was only visible very close to, but its less intensely white colouring and more direct flight clearly distinguished it from the White Terns also present at the time.

A single Crested Tern (*Sterna bergii*) was seen on 12th July at Tarawa, hovering and diving over rock pools in the reef.

After the noddies, the next most common bird was the Lesser Frigate-bird (*Fregata ariel*). Several of these attended every flock of terns or boobies. Only on a few occasions were any number of them seen together, the largest being about 40, attended by 15 Brown Boobies (*Sula leucogaster*) and 20 noddies 15 miles north of Nonouti on 3rd August. They evinced a healthy respect for the large, tightly packed shoals of noddies, and only rarely were one or two seen over the fringes of these, picking out an occasional straggler to pursue. Only once were large numbers of both species seen together, on 20th July, 5 miles south of Tabiteuea, when about 30 Frigate-birds and 300 to 500 noddies wheeled and dived over a seething shoal of fish. On this occasion the noddies did not pack into the dark mass mentioned earlier. They were commonly seen over the south end of Tabiteuea by the camp party there in July, but their numbers fell off until by the middle of August there were days on end when none were seen at all. They were also seen in small numbers from the shore at Nonouti. They were not breeding on Numatong, but were said to nest on the south end of Nonouti. A few were usually seen off here, but it was not possible to visit the place to confirm the reports of breeding.

Brown Boobies (*Sula leucogaster*) were seen up and down the island chain from Butaritari in the north to Tabiteuea in the south. They were never seen in any numbers, the largest single group being the 15 north of Nonouti with the frigate birds referred to above. More usually they appeared singly or in groups of two or three, and were never seen more than 30 miles from land. In the lagoons they were often seen perched on beacons and poles,

A single Blue-faced Booby (*Sula dactylatra*) was seen 8 miles east of Tarawa on 2nd December. This was the only white booby seen at any time in the Gilberts, and its black tail was clearly visible, leaving no doubt as to its species.

One White-tailed Tropic-bird (*Phaethon lepturus*) was put up from the water by the ship on 11th July, 30 miles west of Tarawa.

Only a very few petrels were seen in the area. One dark brown shearwater, about the same size or slightly smaller than a Wedge-tailed Shearwater (*Puffinus pacificus*), and without the long wedged tail, was seen on 17th July off Nonouti. This was probably a Christmas Shearwater (*Puffinus nativitatis*). A few more of these birds were seen between 27th and 31st July, between 50 and 250 miles north of Ocean Island, never more than one at a time.

Single Small Gadfly Petrels similar to Cook's Petrel (*Pterodroma cookii*) were seen on 10th July between Tabiteuea and Nonouti, and again 45 miles south of Tabiteuea on 11th August. They were both palish grey above with a dark W across the wings, white below with the underwing white except for a dark leading edge to the primaries.

Ashore on Tabiteuea a small petrel, about 9 inches long, predominantly dark but with a white patch on its head, was found on the ground, and more of them were seen. They are said to have been fairly tame, but no measurements or photographs were taken.

On all the islands visited Reef Herons (*Demigretta sacra*) were common. Both white and dark phases were seen, in very roughly equal numbers. They were not seen breeding while we were there, but on Tarawa, they were said by the European officials resident there, to nest in the tops of coconut palms. On Tabiteuea they appeared to favour the windward, deep-water side of the islands.

On Tarawa a number of waders were seen on the sand and coral flats on the lagoon side of the islands. Those that we could approach closely enough to identify were all Wandering Tattlers (*Heteroscelus incanous*), darkish purply grey above, pale below, with pale eye-streak and showing no wing or rump markings when put up. Some of them were also seen from time to time on the seaward side of Nonouti, where they used to run along the edge of the waves, often near a Reef Heron.

On Nonouti in August a group of six Turnstones (*Arenaria interpres*) were seen on the beach. They took flight before they could be approached closely, but their bold black and white wing markings leave little doubt that they were correctly identified.

A curlew or whimbrel was seen on the southern part of Tabiteuea. From its size and the shape of its bill it was definitely a *Numenius*, but it did not allow a close enough approach for a specific identification.

Also on Tabiteuea a pair of cormorants was seen on the lagoon at dusk. They were in flight, and in the poor light no details could be seen, and it is just possible that they could have been duck of some sort.

[*Comment.*—According to the most recent account of the birds of the Gilbert and Ellice Islands and their dependencies to the N.E. in the Phoenix and Line groups by P. Child in "Atoll Research Bulletin No. 74," Washington, 1960, very little appears to be known about the birds of the Gilberts themselves, and this account adds substantially to it. Child omits to mention the most important previous account of the avifauna of the group by O. Finsch in the "Ibis" for 1880 (p. 429-434), and the subsequent summary based mainly on this account by L. W. Wiglesworth which

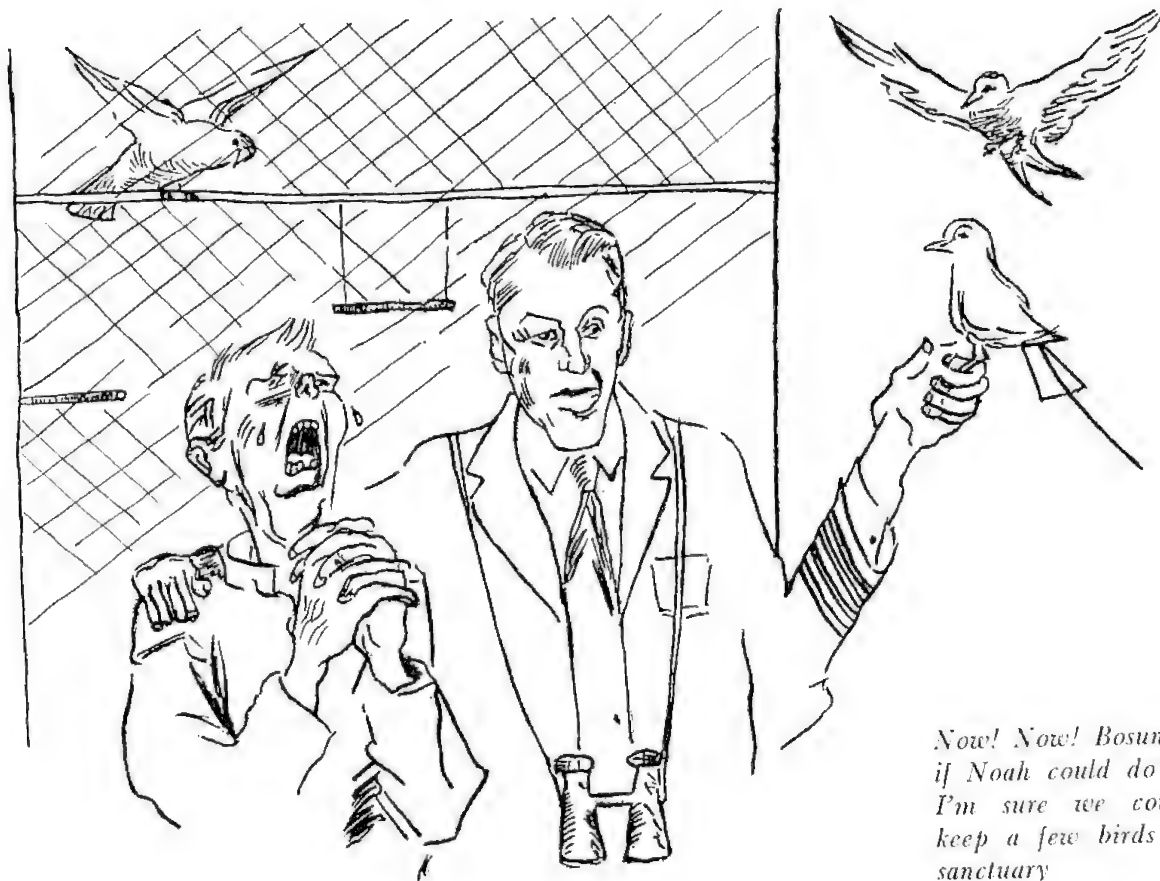
appeared in the "Ibis" at the time of our annexation of the group in 1893 (p. 210-215). From these reports it appears that the Gilberts have always had a poorer avifauna than some of their dependencies such as Christmas Island (discussed by Cmdr. J. G. V. Holt in "Sea Swallow" II:26-28 in 1958), while the seabirds in particular have been further reduced in recent years by rats and other introduced predators and an expanding human population. Terns, especially Black Noddies, have always been the commonest species, while Finsch also saw Brown Noddies and White, Black-Naped and Crested Terns. The Noddies were nesting in December, and the Black-Naped Terns fledging in July. Child adds the Sooty Tern to this list, and implies that it and most other terns breed mainly in our summer, though the Crested and White Terns in particular may nest in our winter and several species like the noddies clearly have prolonged breeding seasons. Finsch only saw feathers of Frigate-birds, but while Child says that Great Frigate-birds (*Fregata minor*) appear to be commoner in the central Pacific area as a whole, like Lt. Cmdr. Morris he apparently only saw Lesser Frigate-birds in the Gilberts. Finsch apparently only saw Red-footed and Blue-faced Boobies (*Sula sula* and *S. dactylatra*) there, and Child implies that these and Brown Boobies are scarce there; Finsch reported both Red- and Yellow-billed Tropic-birds at sea, but it seems likely that all his records of the first species (*Phaethon aethereus*) for the North Pacific may really be erroneous identifications of the Red-tailed Tropic-bird (*Phaethon rubricauda*). Child reports that while the Yellow-billed Tropic-bird still nests in our winter on Nui and Nukufuti, the Red-tailed may now be extinct in the group.

The "seven-inch storm-petrel" from Tabiteuea is presumably the polymorphic species usually known as the White-throated Storm-petrel (*Nesofregatta albigularis*) in the pale phase and the Samoan Storm-petrel (*N. moestissima*) in the dark phase. (I have tried to show elsewhere its scientific name should be *Fregatta fuliginosa*; Bull. Brit. Orn. Cl. 77:40). This appears to be the first record on land for the Gilberts, though Child reports it at sea between Tarawa and Ocean Island in January 1956. Finsch reports three large shearwaters at sea, one all dark with a short tail, doubtless the Christmas Shearwater, one dark above and white below, apparently Audubon's Shearwater (*Puffinus lherminieri*), and one brown above with a white belly, presumably the Phoenix Petrel (*Pterodroma alba*), though the Tahiti Petrel (*Pterodroma rostrata*) which is darker above might also occur. The two smaller gadfly petrels reported by Lt. Cmdr. Morris seem unlikely to be Cook's Petrels, which are cool-water birds, and were presumably Gould's Petrel (*Pterodroma leucoptera*), also called the Collared Petrel (*Pterodroma brevipes*) in the latest edition of "Alexander." Finsch also reported a skua, presumably one of the southern forms of Great Skua (*Catharacta* sp.).

The only breeding landbirds are the Reef Herons and feral domestic fowls; Long-tailed Cuckoos (*Urodynamis taitensis*) from New Zealand and a variety of northern shore and water birds including Pacific Golden Plovers (*Charadrius dominicanus*), Turnstones (*Arenaria interpres*), Wandering Tattlers (*Heteroscelus incanous*), Bristle-thighed Curlew (*Numenius tahitiensis*), Bar-tailed Godwits (*Limosa lapponica*), Mallard (*Anas platyrhynchos*) and Shoveler (*Spatula clypeata*) have already occurred as winter visitors.—W. R. P. BOURNE.]

PORT AUCKLAND AVIARY

Eighty-four



*Now! Now! Bosun—
if Noah could do it,
I'm sure we could
keep a few birds in
sanctuary*

HERE AND THERE WITH THE BIRDS FROM THE EDITOR'S LOGBOOK

DOCTOR AT SEA

A letter received recently which sought advice on the treatment and diet for birds that arrive on board exhausted set something of a problem.

For exhausted land birds, which will certainly be frightened and often cold, rest and quiet in, say, a well ventilated box placed at once in the warmth of the galley, followed later by a little warm water fed through a pipette, is probably the best immediate first aid. But what then?

I looked for back history in the files of R.N.B.W.S. with surprising results! Apart from the fact that some members at sea already have their own aviaries on board for the reception and convalescence of avian visitors until conditions are more favourable for their release, the most favoured temporary accommodation is seen to be the bathroom. I can guess why!

Of course there have been land birds which have completed long and entire assisted passages in the free state where diet has been no difficulty. One recalls the case of the Blue Tit and Chaffinch that entered the Captain's cabin, attracted by a canary in a cage, off the Skaw in Danish waters, were fed on tit-bits and flies by the Captain, spent much time perched on the cage, and finally departed at Capetown.

There was the classic case of the three Indian House Crows that took passage in a ship all the way from Colombo to Melbourne and made their headquarters outside the galley.

We have many others and further instances are reported later in this section.

Ingenuity came to the rescue of two Swallows picked up utterly exhausted in mid Indian Ocean and accommodated in an empty first-class cabin. Five times a day one member penetrated a hold containing a cargo of sheep skins, returning triumphantly with bluebottles in a jar. Before long the swallows were flying onto his hand and chasing bluebottles all over the cabin.

But what of the ocean birds? Let no reader jeer lightly at the valiant efforts of some of our *ad hoc* doctors at sea, faced only with the list of victualling stores, the canteen and the medicine chest, with no bottled plankton on tap!

A few years ago a Hornby's Storm-Petrel, so named by the way after Admiral Hornby who brought one home to the British Museum (Nat. Hist.) in 1870, flew on board a naval flagship between Calloa and Antofagasta. It was weak and unable to fly. The admiral on board took charge and his note on this event records "It soon revived on whisky and salt water and flew off strongly."

In a more royal setting a Phoenix Petrel crashed on board H.M. Yacht "Britannia," and was brought to the bridge in very poor shape with a severe gash about the eye. The diet prescribed, bread soaked in salt water, raw fish and green salad, proved entirely successful over a period of seven days by which time the wound had healed and it flew away.

Tropic Birds have caused their problems. A White-tailed species, blown down a ventilator into the engine room bilges, was retrieved covered in light oil. Again the Captain took charge, cleaned off the oil with soap and water and handed it corned beef and cheese which it gobbled up and vomited! Later, however, it made a square meal off raw haddock and was launched into space none the worse.

A Red-tailed variety was found on board in the Indian Ocean with a damaged wing. For two days it was forcibly fed on cod liver oil and water, and by the third day its natural viciousness had disappeared and it was eating two raw fish a day. It flew off on the seventh day.

There must be many more cases which have not been reported, and we should like to hear of them.

We should also be glad of some rather more serious advice from readers who have experience in bird doctoring.

BRED FROM THE SEA

When Captain E. F. Aikman's ship, s.s. "Beaverglen," was returning from Quebec to Antwerp and was just off Land's End, a Turtle Dove (*Streptopelia turtur*) was found on deck. Its left wing appeared to have been injured. Captain Aikman kept it in his bathroom where it fed lightly on rice and lettuce. Five days later, on 31st May, 1963, the Turtle Dove may well have been surprised to find itself safely lodged in the British Birds' Aviary at the London Zoo.

Sequel: Letter from Mr. J. J. Yealland, the Curator of Birds, to Aikman in August, 1963:

"You may be interested to know that the Turtle Dove which flew on to your ship has bred but has crossed with a Collared Turtle Dove (*Streptopelia decaocta*), as is evident by the appearance of the young bird. There is already another Turtle Dove in the aviary which I am sure is a male, so it is rather strange that your bird should have preferred the Collared."

ASSISTED PASSAGES (*complete voyages*)

INDIAN COMMON CROW (*Corvus splendens*) HOOGLY RIVER TO COLOMBO

A further report, this time from Captain G. C. Atkinson, tells of six Indian Common Crows that came on board as his ship, s.s. "Clan MacIntosh," left the Hoogly River in November, 1962. They remained on board until land was so far away that they were disinclined to take off, and so stayed with the ship until it reached Colombo. Here they found very quickly where food was to be had in the harbour.

PIBIT (*Anthus sp.*) GULF OF ADEN TO INDIA

Captain Atkinson also observed a bird, quoted as a Pipit, arrive on board in the Gulf of Aden in September, 1962. The ship was carrying a deck cargo of horses and cattle, and the bird was seen feeding around the beasts until the ship arrived in India.

SPARROWS (Sp.) VESPER (*Poecetes gramineus*), LINCOLN'S (*Melospiza lincolni*), or possibly SEASIDE (*Ammospiza maritima*) NEW YORK TO LIVERPOOL

Chief Officer K. D. A. Lamb reported that on 13th October, 1962, when s.s. "Sylvania" was in 40°N. 66°W., scores of land birds visited the ship. One of these, an American Flicker (*Colaptes auratus*) stayed on board for four days in his cabin feeding off lightly boiled egg, cereals and breadcrumbs and requiring a constant supply of fresh water. Unfortunately it fell into the lavatory bowl when no one was at hand and so perished. However two sparrows, whose identity could only be judged as quoted, travelled right across the Atlantic to Liverpool in the Officers' Stewards' quarters. When caught and flown off on 21st October by Officers' Steward H. Porter, they were last seen flying strongly over the dock sheds.

Eighty-six

UNUSUAL WING MARKING OF LESSER BLACK-BACKED GULL

When Chief Engineer L. J. Macinnes, s.s. "Otina," was sailing westwards towards Gibraltar on 24th January, 1963, and some thirty gulls were following the ship, he noted one adult Lesser Black-backed Gull which carried on the upper surface of each dark wing two white bars parallel to each other and to the line of the primaries. The bird was easily identified a long way off as this white pattern was very conspicuous. Eleven days later, as the ship was sailing eastwards, the bird was picked up again in much the same position. On each occasion the bird followed for at least 24 hours. The mean position was 37°N, 8°E.

OPPORTUNITIES FOR SEA BIRD OBSERVATION FROM A CABLE LAYING SHIP IN THE SOUTH PACIFIC

Post Office Engineer J. G. Worgan, H.M.T.S. "Monarch," was on board during the ship's lay of 1,251 nautical miles of cable from Suva to Auckland, New Zealand, in 1962, and reports on the excellent opportunities of observing ocean birds during these operations.

At night Red-tailed Tropic Birds were attracted by the ship's flood-lighting, and on one occasion six of these birds were around the floodlights like moths.

Wandering Albatrosses gave trouble. Three of them kept colliding with the thin, taut wire measuring gear streamed astern during the lay. One bird hit the wire three times and parted it. Later another, which hit the wire, was cartwheeled neatly into the ditch!

In 1963 the ship will be laying 1,200 nautical miles of cable from Vancouver towards Honolulu.

Late Note: Worgan's report sheets for the 1963 lay have just been received and include seven separate Census Sheets, sea birds, and four bird in hand examination forms, and photographs. They contain much interesting information on sightings in the Eastern North Pacific.

COURTSHIP AND MATING ON BOARD

The arrival of land birds on board ships does not always override the "call of Spring."

Stephen Chapman, on board whose ship 8 Evening Grosbeaks descended 14 miles off Cape Sable on 13th March, 1963, reports as follows:—

"While these Grosbeaks were on board I noticed an interesting incidence of courtship behaviour. A male and female were engaged in much beak kissing accompanied by loud calling. Both birds postured flat on their tarsi with partially spread wings. This encounter lasted about one minute. Later two male birds and a female repeated this display."

Two Barn Swallows (*Hirundo rustica*) flew aboard Chief Officer Agnew's ship, m.v. "Norfolk," in the Caribbean Sea in November, 1962, and made good use of the accommodation for a day and a half, even being seen to mate in the Captain's cabin!

FULMAR PETRELS MOB WILD DUCK AT SEA

On 2nd November, 1962, 200 miles west of Ireland, Stephen Chapman sighted 2 Mallard (*Anas platyrhynchos*) flying round his ship. On two separate occasions they both alighted on the sea, swimming uneasily until

several Fulmars approached. The Fulmars were very curious at the sight of the duck and settled around them on the water with others in flight. The Mallard took flight at once followed by all the Fulmars, which, however, soon lost interest and resumed criss-crossing the wake.

REPORT OF A BIRD EXAMINED IN THE HAND

AMPLIFYING DETAILS

This R.N.B.W.S. form has been devised to describe, measure and provide detailed identification of live or dead birds captured on board. To be of value accurate details of the colour of the plumage of the different portions of the upperparts, underparts, wings above, wings below, tail, colour of bill, legs, feet, and eye, and precise measurements of overall length, wing span, bill, tail, tarsus, toe and wing are required. The colour of the bill, eye and legs can only be assessed properly in living birds, and the identification of food vomited by live birds is of the greatest value.

The weighing of birds accurately will not be easy with the apparatus available on board. However weight should be added when possible, preferably in grammes, otherwise ounces.

The following notes on measurements are in amplification of the brief details given on the form:—

GREATEST OVERALL LENGTH. GREATEST OVERALL WING SPAN. These are not recognised museum measurements. The following methods are recommended.

GREATEST OVERALL LENGTH. Place the bird belly down on the deck. Make mark on deck at tip of bill and tip of longest tail feather. Measure along deck between these points.

GREATEST OVERALL WING SPAN. This is best measured by extending the wings gently at right angles to the body and getting a colleague to measure the span across the back from wing tip to wing tip.

BILL (Culmen—Chord from margin of feathers above to tip of bill)—self evident.

TAIL (between base of central feathers to tip of longest feather)—self evident.

TARSUS (from notch behind to knuckle in front). This is the measurement of the length of the lowest leg bone, tarso-metatarsus, between the knuckle at base of toes in front to the notch behind the next knuckle above along the length of the leg.

TOE (Extended middle toe and claw in large birds, hind claw in pipits). Self evident.

WING (length from angle to tip flattened against ruler). Wing length is defined as the distance along the **CLOSED** wing from the extremity of the carpal joint to the tip of the longest primary. The carpal joint, actually the wrist joint, is very evident when the wing is closed and is the first angle or knob in the wing working forwards from the tip of the primaries. The ruler should be placed under the closed wing with the zero at the point of the carpal joint, and using the tip of the longest primary as the pointer gently flatten the wing against the ruler. Wing joints are flexible and if the bird is handled gently this should not harm it.

SKETCHES AND PHOTOGRAPHS. There is a space on the form on which to make sketches of outstanding features, e.g., shape of bill, tail, etc. Additional notes should be written here. **DO NOT FORGET THE GREAT VALUE OF PHOTOGRAPHS ACCOMPANYING THE FORM—THESE CAN BE SENT LATER WITH A REFERENCE TO THE NAME OF BIRD AND DATE AND PLACE WHEN MEASURED.**

SPECIMENS. The form in no way overrides the value of forwarding specimens of **LESS COMMON** sea or land birds which may have come to grief on board.

NOTE:—A revised report form will be issued shortly providing for the inclusion of further information, and enabling the form to be completed in a normal short based typewriter (vertical presentation).

Well found

Crombie fleece bridge coat,
navy blue only — ready
made £33.7.6.



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ROYAL NAVAL BIRD WATCHING SOCIETY

REPORT OF A BIRD EXAMINED IN THE HAND

SERIAL No. :

YEAR OBSERVER (CAPITALS) SHIP RINGING DETAILS (IF RINGED)

DATE	SHIP'S POSITION	DISTANCE FROM LAND	WIND DIRECTION	SEA TEMP.	DIRECTION	REMARKS
		MILES .....	.....	(Sea Birds)		
TIME	LAT.	VISIBILITY	FORCE		ARR. FROM	1. CONDITION : -
	LONG.	MILES .....	.....		DEPT. TOWARDS	2. DURATION OF STAY ONBOARD : -
						3. BEHAVIOUR : -
IDENTITY OF BIRD	COMMON NAME			SEX (M. OR F.)		4. FOOD TAKEN OR VOMITED : -
IF KNOWN	LATIN NAME			AGE (A. OR I.)		

DESCRIPTION :-- Quote colour and shade of colour, e.g., light grey, olive green, mottled brown, streaked, etc., against each section.

SKETCH DETAILS OF
OUTSTANDING POINTS

UPPERPARTS

FOREHEAD : —
CROWN : —
NAPE : —
BACK : —
RUMP : —

UNDERPARTS

CHIN : —
THROAT : —
BREAST : —
BELLY : —
FLANKS : —
UNDER TAIL : —

WINGS ABOVE

PRIMARIES : —
SECONDARIES : —
UPPER WING COVERTS : —
WING BARS OR SPECIAL FEATHER MARKINGS : —

WINGS BELOW

UNDER WING COVERTS : —
UNDER WING EDGES : —
AXILLARIES : —

TAIL

SHAPE : —
COLOUR : —
FEATHER MARKINGS : —

BILL

SHAPE : —
UPPER MANDIBLE : —
LOWER MANDIBLE : —
TIP : —
INTERIOR : —

LEGS AND FEET

COLOUR AND MARKINGS OF EACH : —
WHETHER WEBBED OR LOBED : —

EYE

IRIS : —
SKIN ROUND EYE : —
OTHER BARE SKIN : —

MEASUREMENTS: QUOTE IN MILLIMETRES.

Note: Measurements are best taken by using dividers and transferring to a mm. scale.

GREATEST OVERALL LENGTH:—

GREATEST OVERALL WING SPAN:—

BILL (CULMEN-CHORD FROM MARGIN
OF FEATHERS ABOVE TO TIP OF BILL):—

TAIL (BETWEEN BASE OF CENTRAL
FEATHERS TO TIP OF LONGEST FEATHER):—

TARSUS (FROM NOTCH BEHIND TO
KNUCKLE IN FRONT):—

TOE (EXTENDED MIDDLE TOE AND CLAW
IN LARGE BIRDS, HIND CLAW IN PIPITS):—
WING (LENGTH FROM ANGLE TO TIP
FLATTENED AGAINST RULER):—

MOULT. STATE IF OBVIOUS DIFFERENCES BETWEEN OLD AND NEW FEATHERS ON BODY OR SHORT GROWING FEATHERS CAUSING GAPS IN WINGS OR TAIL.

PARASITES. TYPE, IF KNOWN:—

BIRDS WHICH DIE ONLY. IF YOU CANNOT SAVE WHOLE BIRD, SAVE WINGS, TAIL AND LEGS.

NOTE AT ONCE COLOUR OF SOFT PARTS IN LIFE:—

STOMACH CONTENTS:—

GONADS (SEX, SIZE):—

IF POSSIBLE. SKIN BIRD AT THE TIME, OR PRESERVE BODY BY INJECTING WITH 10% FORMALINE OR SURGICAL SPIRIT, OR PLACE IN A REFRIGERATOR. ATTACH CARD WITH FULL DETAILS OF PLACE OF DEATH AND YOUR NAME AND ADDRESS. PLACE IN PLASTIC BAG AND SEND TO NEAREST LARGE MUSEUM. INFORM R.N.B.W.S.

SKETCH. INCLUDE OUTLINE SKETCH AND INDICATE COLOURS WITH ARROWS TO POSITION. EMPHASISE OUTSTANDING FEATURES SUCH AS SHAPE OF BILL OR LEGS SEPARATELY. IF PHOTOGRAPH, KEEP SEPARATE. WITH SMALL BIRDS, TRACE SHAPE OF OUTSPREAD WING ON PAPER.

Please return this Form to:—

THE EDITOR, R.N.B.W.S.
PRATTENDENS, BURY, PULBOROUGH
SUSSEX

THE ROYAL NAVAL BIRD WATCHING SOCIETY
Receipts and Payments Account for the Year ended 30th November, 1962

1961			RECEIPTS																	
£	s.	d.	£	s.	d.									£	s.	d.	£	s.	d.	
185	17	5				Balance 1st December, 1961: Cash at Bank											186	1	5	
						Subscriptions:														
			27	7	0	Current year—under covenant								28	14	0				
			46	16	0	Other								51	3	0				
				10	0	Arrears								2	14	0				
			3	10	0	In advance								9	1	0				
78	3	0															91	12	0	
						Donations:														
			3	4	0	Under covenant								3	4	0				
			2	8	2	Other								18	11	6				
5	12	2																		
19	6	10				Income Tax recovered on 59 members' covenanted subscriptions and donations up to the 5th April, 1961 (see Note 1)											21	15	6	
19	18	0				Sales of Members' Ties (9)											8	4	0	
						Other receipts:														
			33	12	0	Sales of <i>Sea Swallows</i>								13	12	0				
			1	7	6	Sales of Sea Passage lists								19	3					
			18	18	0	Advertisement in <i>Sea Swallows</i>								14	13	0				
53	17	6															29	4	3	
24	6	0				Sales of 1961 Christmas Cards (see Note 2)											12	18	1	
			NOTES—																	
			1. Refund of Income Tax amounting to £20 3s. 11d. on 61 members' covenanted subscriptions and donations for the financial year ended 5th April, 1962, is at present receiving attention from the Commissioners of Inland Revenue.																	
			2. Receipts for the sale of 1962 Christmas Cards are not yet available for inclusion in this year's accounts.																	
£387 0 11			£349 15 3																	

NOTES—

- Refund of Income Tax amounting to £20 3s. 11d. on 61 members' covenanted subscriptions and donations for the financial year ended 5th April, 1962, is at present receiving attention from the Commissioners of Inland Revenue.
- Receipts for the sale of 1962 Christmas Cards are not yet available for inclusion in this year's accounts.

1961			PAYMENTS															
£	s.	d.	£	s.	d.								£	s.	d.	£	s.	d.
18	13	6				Postage and Stationery	...	...	...	...	...	...				20	14	7
						Printing:												
						Sea Swallows 1961 (500)	...	...	...	...	...	...	115	12	6			
			90	5	6	Sea Bird Report Sheets (1,000)	...	...	...	...	...	...	—	—	—
			6	0	0	Bulletins Nos. 50-52	...	...	...	...	...	...	8	0	0			
			7	10	0	Joining Forms	...	...	...	...	...	...	—	—	—
				15	0	Letterhead Sheets	...	...	...	...	...	...	1	15	0			
			1	15	0	Information Leaflets	...	...	...	...	...	...		10	0			
			—	—	—	Minutes of 1961 Annual General Meeting	...	...	...	...	...	...	1	1	0			
			1	2	0	New Bird Census Form	...	...	...	...	...	...	4	10	0			
			—	—	—											131	8	6
107	7	6				Expenses of Annual General Meeting 1961	...	...	...	...	...	...				10	8	0
	19	0				Subscriptions	...	...	...	...	...	...
			2	0	0	British Trust for Ornithology	...	...	...	...	...	...	2	0	0			
			1	0	0	Council for Nature	...	...	...	...	...	...	1	0	0			
																3	0	0
3	0	0				Purchase of Members' Ties (48)	...	...	...	...	...	...				—	—	—
39	10	6				Christmas Cards 1962 (2,000) (including postage)	...	...	...	...	...	...				34	12	10
29	6	10				Bank Charges and Cheque Books	...	...	...	...	...	...				1	5	8
2	2	2				Balance 30th November, 1962: Cash at Bank	...	...	...	...	...	...				148	5	8
186	1	5																
£387	0	11														£349	15	3

I have examined the above Account with the books and records of the Society and certify that it is correct and in accordance therewith.

ST. MARY AXE HOUSE,
59/60 ST. MARY AXE,
LONDON, E.C.3.

5th December, 1962.

R. G. PEGLER,
Chartered Accountant,
Hon. Auditor.

NEW MEMBERS 1962/63

Honorary Member:

DR. MARY C. RADFORD, Edward Grey Institute for Field Ornithology

Members:

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BAILEY, P. G., C.P.O. Ch. Mech: A/E	R.N. Air Station, Culdrose
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SILVESTER, W. Mate	Motor Trawler "Lepanto"
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WILSON, J. A. Captain, M.N.	M.V. "Copsewood," Constantine Lines
YOUNG, M. Naval Air Mechanic (O.)	H.M.S. "Centaur"